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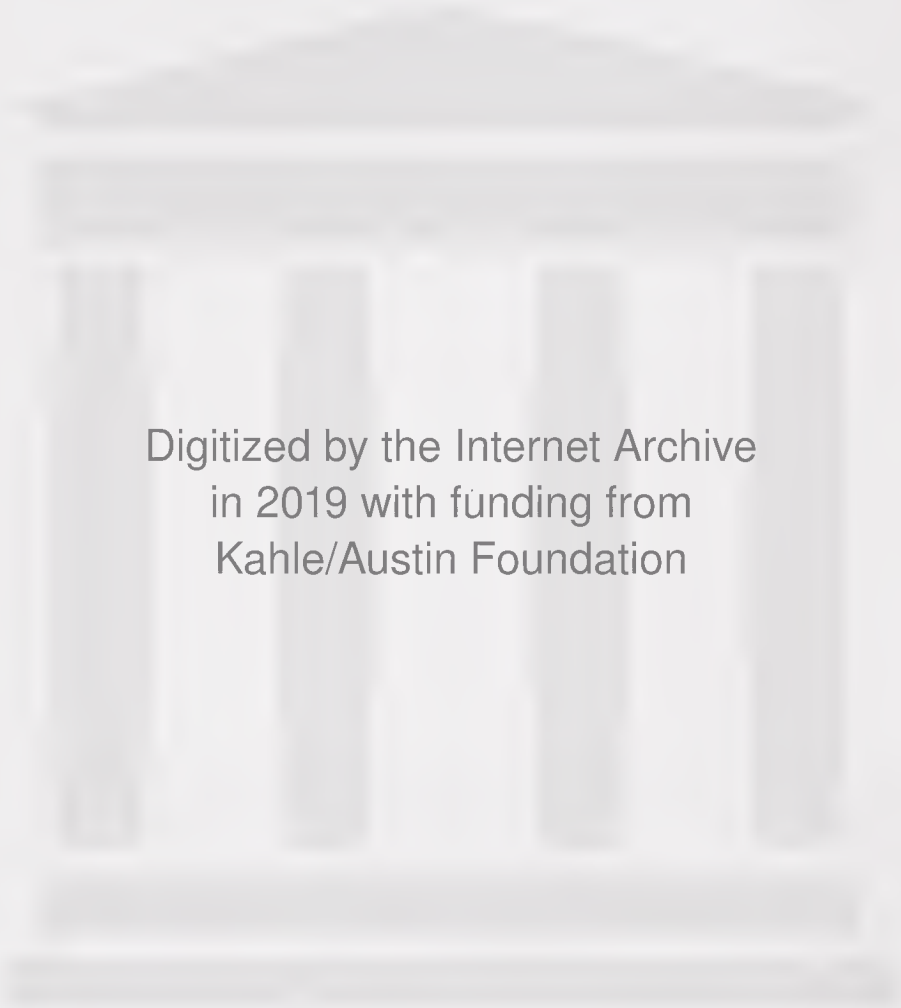

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VOL. XLV

SIR WILLIAM MONSON'S NAVAL TRACTS

VOL. IV.

THE NAVAL TRACTS

OF

Sir William Monson

IN SIX BOOKS

EDITED

WITH A COMMENTARY DRAWN FROM THE STATE PAPERS
AND OTHER ORIGINAL SOURCES

BY

M. OPPENHEIM

VOL. IV.

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BOOK III.—(*continued*).

Instructions from a General to his Vice-Admiral, Rear-Admiral, and Captains, to be observed by them at Sea.

MORE than the reputation of being Vice-Admiral is that of being second man in command; and that in absence or death of the Admiral he has the absolute charge. Yet, in presence of the Admiral, he is to follow the instructions given by him, or resolved on by council, in which council he is the second person and is to have all rights done to him next the Admiral. As he is Vice-Admiral of the fleet, so is he Admiral of a squadron; and as he wears the flag in the fore top, being Vice-Admiral, so he is to wear what coloured flag he please * in the main top as Admiral of his squadron. He is to have a Vice-Admiral and Rear-Admiral of his squadron, though the use of a Rear-Admiral is but a late invention in comparison with the other two, and is allowed but the ordinary pay of a captain; but the Vice-Admiral of the fleet has half the pay of the Vice-Admiral.† These two are to wear the same flags; the Vice-Admiral does the one in the fore top, the other in the mizen, and every ship of the squadron, besides, is to wear

* *Sic* in MS.

† There is no MS. authority for the involved statement about the pay of the Vice-Admirals, but the meaning is, plainly, that the pay of the Vice-Admiral of a squadron was half that of the Vice-Admiral, and second in command, of the fleet.

a streamer of the same colour in the fore top or mizen yardarm to be distinguished from other squadrons.*

The instruction for his squadron is to hail him once in twenty four hours. And how to be gathered together out of the fleet, when he pleases to call them, and many other observations, are to be expressed in the general articles from the Admiral. And, because every ship in the fleet receives the same instructions, it is fit that the captain under the Vice-Admiral and the master of the ship † be perfect, and have, as it were, by heart all the articles before mentioned, so that as soon as they see a sign made by the Admiral they may prepare to work accordingly.

It is requisite that the captain under the Admiral, or Vice-Admiral, be a man of great experience in the carriage of sea business, for he is always ready at hand to advise when council cannot repair on board. Yet this place is of so little esteem among us that there is no allowance for it, though amongst the Spaniards it is a place of great reputation and has the title of Capitan de la Capitana.

* R. has a marginal note :—' The Rear-Admiral of a fleet now hath half the pay of a Vice-admiral, and in the Queen's time he had but the pay of a captain.'

† R. has a marginal note :—' King Charles I. hath given so much now to this officer as the Queen did formerly to a captain.'

Such Instructions as were given in the Voyage in 1635 by the Right Honourable Robert, Earl of Lindsey.

1. FIRST, and above all things, you are to take care that all the officers and companies of ships do offer their best devotion unto God twice a-day, according to the usual practices and liturgy of the church of England.

2. In your own particular, you are to have special care that you perform your duty faithfully and with diligence. And if any seaman, or other in your ship, shall raise faction, tumult, or conspiracy, or commit manslaughter or murder, or shall quarrel or fight, or draw blood, or weapon to that end, or commit theft, or other heinous capital offence, you shall cause precise information to be brought to me thereof that I may inflict condign punishment upon each offender according to the condition of his crime.

3. If any under your command in that ship shall be a common swearer, blasphemer, railer, drunkard, pilferer, or sleep at his watch, or make a noise and not betake himself to his place of rest after the watch is set, or shall not keep his cabin cleanly, or be discontented with his proportion of victuals, or shall spoil or waste them or any other necessary provision for the ship, or shall commit any insolence or disorder fitting by you to be corrected, you are to punish them according to the order and custom of the sea.

4. You shall take a perfect account, by the officers in your ships to whom it belongs, of the receipts of the expenses, and remains, of victuals, ammunition, and allowance of provision and stores aboard your ship, and so weekly to continue the same, not suffering any spoil or waste to be made thereof, but to preserve them all the best you can, both in quantity and quality. And you shall not suffer any works to be done in the ships that shall not be needful and necessary for the same.

5. To prevent the needless expense of powder and shot you are to take weekly account of the master gunner of the expense of the powder and shot, and all manner of ammunition, provisions, and stores contained in his indentures, not permitting any part thereof to be wasted or embezzled. Nor any piece of ordnance to be shot without particular order or directions from yourself, and that upon very necessary occasions and according to his Majesty's proclamations, unless it be for salutes, keeping the true number and kinds of the shot that their accounts may be thereby examined, which are not to be allowed in the Office of the Ordnance without approbation under your hand.

6. You are to keep a competent number of men allowed to your ship complete, and to have a full proportion of healthy and able-bodied mariners and seamen, and but the allowed number of your retinue, that your ship be not filled with idlers. And to take care to get such as are able and healthful bodies, and not boys or infirm persons, to perform his Majesty's service.

7. You shall not suffer any boat to go ashore without special leave; and then but upon necessary occasions, as to fetch water, or the like.

8. You shall perform to me all due respects and obedience, not taking the wind of me at any time if you be not forced to it, but keep company with me as much as you may, speaking with me both morning and evening to know my pleasure, and so often as you see my flag of council in my mizen shrouds you shall come on board me. And when I shall weigh anchor at the report of a warning piece you shall do the like, and anchor when I anchor, ranking yourselves under the colour of your squadron, the Vice-Admiral taking his place within me and the Rear-Admiral without.

9. In the night I will carry two lights which you are to observe and follow, bearing the same course I do without straggling unless storms or tempests divide us, and then with expedition to return to the place of rendezvous which I shall direct. But if you happen to spring a leak, spend a mast, or be otherwise distressed by fire, you are to give notice by shooting off two pieces of ordnance that other ships may hasten to your help to avoid danger.

10. If you discover any ships at sea you are to give notice thereof by shooting off a piece and letting fall your main topsail so many times as there be ships. And if they appear to be Turkish pirates, or sea-rovers, you shall shoot two or three pieces to warn the whole fleet to put in order either to fight or pursue.

11. It must be your principal care to preserve his Majesty's honour, coasts, jurisdictions, territories, and subjects, within the extent of this your employment, as much as in you lies, that no nation or people whatsoever intrude thereon or injure any of them. And if you shall chance to meet in the Narrow Seas any fleet or ships belonging to any Prince, King, or State, you are to

expect that the Admiral or chief of them, in acknowledgement of his Majesty's sovereignty there, perform their duty and homage in passing by ; and if they refuse to do it you are to enforce them thereunto ; and in any wise you are not to suffer any dishonour to be done to his Majesty, or derogation to his sovereign power in those seas. And if any of his Majesty's subjects shall so much forget their duties as not to strike their topsail in passing his Majesty's ships you are to enforce them thereunto, and to punish the commanders of such a ship yourself, or to give me advertisement of it that I may take a course with them.

12. You are not to suffer any man of war to fight with each other, or man of war with merchant, in the presence of his Majesty's ships in the Narrow Seas, but you are to do the best in those seas to keep peace for the better and free maintenance of trade and commerce through the same. For that all men trading or sailing within those, his Majesty's, seas, do justly take themselves to be *in pace Domini Regis*, and therefore his Majesty in honour and justice is to protect them from injury and violence.

13. If you chance to meet with any strangers' ships riding at anchor in any of his Majesty's bays or harbours with counterfeit colours, which is a practice of late much used to entrap such foreigners as trade on his Majesty's coasts, you are to apprehend and bring them unto me, or send them safe into some of his Majesty's ports, to answer such their presumption and offence according to law.

14. If you happen to take any ship and goods from any pirate, sea-rover, or other offender, you must be careful that they be kept in safety, and that no part thereof be spoiled, wasted, or

embezzled, spiking down the hatches and holds, and bring them to me that I may send them to his Majesty's ports and harbours for his Majesty's use.

15. If you meet with any men of war, merchants, or other vessel, or ship belonging to any Prince or State, either at sea, or in any road, or other place where you shall happen to come, you are to send to see whether there be any English, Scotch, or Irish, or any other of his Majesty's subjects. And if any seamen, gunners, pilots, or mariners, shall be found aboard any of them you are not only to cause such of his Majesty's subjects to be taken out and brought to me, to answer their contempt to his Majesty's proclamation in that kind, but also to admonish the captain and principal commanders and officers in such foreign ships and vessels that they receive or entertain aboard any of their ships no more his Majesty's subjects aforesaid, that his Majesty have no cause to resent it at their hands. But you are to have special care that no man be permitted to go aboard any ship or vessel of any of his Majesty's friends or allies, to search for any of his Majesty's subjects as aforesaid, for whose fair and honest carriage you will not answer : and you are not in any case to suffer any violence, wrong, or interruption to be given by any of your company to any of his Majesty's friends or allies behaving themselves fairly and respectfully.

16. You shall do your best endeavour to hinder that none of his Majesty's subjects whatsoever at sea, or inhabitants on the coast, do buy, sell, or barter with pirates, or sea-rovers, and, taking notice of such as do or have done, see you give me notice of it, with their names, places of abode, together with a particular of their offences, and

such examinations and proofs as you have against them, that I may acquaint the State therewith.

17. If any man of war, or other, in any of his Majesty's roads, harbours, or coasts, shall offer any violence in taking out any vessels, goods, or merchandize unduly, or commit any other insolences, you shall do your best to recover the same again from them, and reform the abuse either by due admonition or, if that will not serve, by bringing the offenders to answer by justice, preserving by all means the honour of his Majesty from such insolences as much as in you lies, having always due regard to the amity betwixt his Majesty, his friends and allies.

18. If we happen to descry any fleet at sea, which we may probably know or conjecture designs to oppose, encounter, or affront us, I will first strive to get the wind, (if I be to leeward) and so shall the whole fleet in due order do the like, and when we come to join battle no ship shall presume to assault the Admiral, Vice-Admiral, or Rear-Admiral, but only myself, my Vice-Admiral, or Rear-Admiral, if we be able to reach them. And the other ships are to match themselves accordingly as they can, and to secure one another as cause shall require, not wasting their powder at small vessels or victuallers, nor firing till they come side to side.

19. You must be careful that no bed of straw, or combustible matter, be aboard in time of fight, nor shall permit any powder to be carried up and down in open barrels or budge barrels; but to command the gunners to lade cartridges, which may be kept covered. And for prevention of fireworks you are to cause the vessels of urine

to be in readiness in your ship, and shall enjoin your ship carpenter to observe carefully in the fight if any shot chance to fall near the bulging-place of the ship, and ever to be ready to stop them with salt hides, sheet-lead, plugs, or whatsoever may be fit.

20. Before fight you are to see all things put in order; then to encourage the company, and not to suffer them to board the ship or vessel that shall oppose them till the smoke of their ordnance be cleared up, nor till the men above hatches be slain or beaten off.

21. When we set sail, the Vice-Admiral with his squadron shall sail a-head the Admiral a convenient distance; and the Rear-Admiral astern, observing the like distance. Every ship is to rank himself under the colours of his own squadron, allowing one another fair room for fear of falling foul if it should happen to be rough weather.

22. In the night I will bear two lights in my poop; the Vice and Rear-Admirals falling something astern of me, but keeping their distance, shall each of them bear one light in the poop for the rest of the squadron to follow. Both Vice and Rear-Admirals shall speak with me twice a day, morning and evening, if wind and weather will permit, and having received such directions as I shall give them they are to fall in their places again.

23. If I cast about in the night I will shoot a piece of ordnance and shew two lights, one above the other, which you are to answer that I may know you see me.

24. If I am forced to bear round* you shall

* *Sic.* Qy. 'bear room,' or to go large, from the wind. If the text is exactly correct it would mean to run before the wind.

see three lights on the poop of my ship, and you shall shew the like.

25. If your ship should happen to run aground upon any danger, (which God forbid) you shall shoot four pieces of ordnance, one a little after the other; if in the night, you shall burn a fire-pike.

26. If by day or night you find yourself near any rock, sands, or shoals that may be dangerous you shall shoot off three pieces and cast about; but if in the night you shall hang out two lights at your fore topmast head.

27. If I shorten sail in the night, by reason of the foul weather, I will shew three lights on my poop, one above the other; if I try or hull,* besides those I will shew two in my shrouds; and you shall do the like that I may know you understand me.

28. If in foul weather we lose company, and after come in sight of one another:—if in a topsail gale you shall strike and hoist your fore topsail twice, but if it be not a topsail gale you shall brail up your foresail and let it fall twice; and if you are answered by the like sign it shall betoken they are of our fleet. And if in the night you come up and hail one another the word shall be *Charles*, and the answer *Mary*, whereby you shall know the other.

29. If in the night it be foul weather, and overblow, every ship shall carry a light in his poop that we may the better keep clear one of another; and in thick foggy weather, either by day or night, you are to make a noise with drum, trumpet, or ringing your bell, and sometimes shooting .off a

* To try was to lie to with more or less canvas; to hull, to lie to without canvas and with the helm lashed a-lee.

musket, whereby you may keep clear one of another. And if in such weather I cast about by day I will shoot off a piece of ordnance; and in the night I will shoot a piece and use the sign before mentioned.

30. You shall keep one continually in your topmast head to look abroad; and if you discover any fleet or ships, which you conceive I see not, you shall put your ancient in your top and bear with them till you perceive I see them. And let no man presume to wear a flag, though absent from the fleet, but those to whom it properly belongs.

31. Our principal place of rendezvous is in the Downs whilst our employment is to the eastward of the Isle of Wight; if to the westward, Falmouth; whither you are upon all occasions to repair if you should be absent from me, except you hear otherwise where I am, and then to come to me there to receive such farther instructions as I shall have occasion to deliver to you from time to time for the advancement of the service we have in hand; or where you may conceive wind and weather may force us for more safety, either Wight, Plymouth, or any other port.

32. You are to be careful to keep your company in good order, peace, and unity, one with another, and to see that they have their allowance of victuals in good order.

33. When you see the British flag spread upon the mizen shrouds, then the council of war is to come aboard me; if the red ancient, then both captains and masters.

34. And when there shall be any occasion to dispose of you upon any service apart I shall then give you such farther directions as the

service requires. And so God keep you and send us a prosperous voyage.

From on board his Majesty's Ship Royal, the Merhonour, *riding in the* Downs, *the* 30*th of* May, 1635.

Signed,

LINDSEY.*

* Lindsey's Orders to his captains were probably used by Monson when he prepared his work finally for the press. They do not appear in the MSS. collated for this edition. In their place are Orders issued by an Elizabethan Admiral, perhaps Monson himself, in 1603, which, with Drake's Plymouth harbour orders of 1589, seem to be of sufficient independent interest to be printed as an appendix.

The distinct Practice, or special Duties, of Officers belonging to the King's Ships at Sea.

The Captain's Office.

THE Captains in Queen Elizabeth's time were gentlemen of countenance and means, maintaining their diet at their own charge.

A Captain has power, upon just cause of mutiny, misdemeanour, or embezzling the King's goods, to displace any inferior officer, except the master, who has the absolute charge of conducting the ship in and out, according to the direction given by the Captain, to the place whither he should sail the same. And in case the master commit any offence meriting blame during the voyage, the Captain may require stay of his wages till the matter be heard before the Principal Officers of the Navy, or the Lord Admiral himself, if the offence be criminal.

The Captain may require a copy of the sea book from the purser and muster the company at his pleasure: likewise the boatswain, gunner, and purser ought to shew the Captain what sea stores they have received into their charge for the voyage, and he may require a copy of the indenture, or bills of charge; in like sort a note of the several kinds of victuals from the purser at the end of the voyage to certify what has been in any sort extraordinarily expended in his Majesty's

service, or wasted, or lost by unavoidable accidents; without which the King's officers should not give any extraordinary allowance upon their accounts respectively, provided that nothing be allowed upon such certificate but what has been formerly lost, and truly issued for his Majesty's service only. The Captain must be very cautious not to remove any of the aforesaid officers that have the King's goods under their charge unless upon urgent necessity, for matters criminal or neglect of the service; and then to take good testimony what stores are remaining at the time of their discharge, and to commit the same to such hands as may be able to account for the same to the Officers at the end of the voyage.

After the ship is at sea the purser ought not to enter or discharge any of the company but by the Captain's special order.

The office of a Captain is to be distinguished into two kinds, *viz.* a Captain that is lawfully chosen by a General, serving under the patent of a prince, from which General the Captain receives his commission for his employment, and instructions for him to follow during the time of the voyage; and at the end thereof to be paid the entertainment of a Captain as aforesaid.

The Captain ought to have experience and ability, by his art and skill, to control his master if he do amiss, or else his master may willingly commit such an error as will cast a disgrace upon his Captain.

These latter times have advanced Captains who only take upon them that name, holding it a maxim that they need not experience but refer themselves to the direction of a master. I must say that the Generals who place such Captains are very careless of their master's service, and

forgetful of their own rising from the degree of a soldier to a General, and the mischiefs that ensue upon it; nay, I will say that such a General is improvident of his master's profits. For if a master should direct a Captain, and have the managing of the charge committed to him, why should a prince allow ten shillings* a day to a Captain, when a master can execute the place of both Captain and master for his bare allowance?

A Captain of experience, being thus settled in his command, is to see that every officer be chosen in such places that they may be able to execute the charge committed to them, and not to advance any unworthy person for affection. This Captain, under a General, has lawful authority to punish offences committed within his ship; or, if his company grow contumelious or stubborn, he may have recourse to the General, who will inflict more stricter chastisement, as death, if they deserve it, which no private Captain can do.† If a Captain shall misdemean himself against his company, the like censure he shall receive from his General, whose supreme authority begets moderation and agreement amongst them, which the ships of reprisal have no means to accommodate but by violence.

What instructions the Captain shall receive from his General needs no other repetition than I have already declared in the Instructions set down in this same book, to which I refer you; but with this caution, that you be careful to observe what is there contained. A Captain is to make choice of his lieutenant, and it is as necessary that he be a

* B. and R. have 'five shillings.'

† The phrase 'which no private Captain can do' does not occur in MS. (cf. *ante*, iii. pp. 20, 63).

man of experience as himself; and though no such officer be allowed in his Majesty's ships but of late,* and that the master repines to have a lieutenant above him, yet do I hold it fit to have a lieutenant, and he to have entertainment from the King, as well as his allowed shares in a ship of war, for these reasons :—

A lieutenant is an employment for a gentleman well bred, who knows how to entertain ambassadors, gentlemen, and strangers when they come aboard, either in presence or absence of a Captain. A lieutenant is to be sent on a message, either aboard ships or ashore, upon any occasion of service though it be to great persons, an unfit employment for a master; besides the master is not to depart out of the ship, or leave his place but in case of necessity. A lieutenant knows how to use gentlemen and soldiers with more courtesy and friendly behaviour, and will give better satisfaction than any mariner or master can do, who have not been bred to it but in the rude manner of a mariner. A lieutenant in a fight is to command the forecastle, or the soldiers before the mast, as the Captain does abaft the mast, and to see that every man does the service he is commanded.

But the lieutenant must have a care that he carry not himself proudly or peremptorily, nor that his Captain give him power or authority to intermeddle in the master's office. For where there is a heart-burning between the lieutenant and the master it will make it burst out into open discontent, and then will follow mischiefs and factions among the company.

* Some of the ships of the 1588, and of later, fleets carried lieutenants, but it was not a permanent rank in the first half of the seventeenth century.

The Second Degree of a Captain, viz. in Ships of Reprisal.

THIS captain I shall treat of is much inferior to the authority of the other I have spoken of. First, his title is not authorized by the immediate power of a prince, but by a subordinate; for a King of England in time of war substitutes his Lord High Admiral of England to grant out letters of reprisal to his subjects, to take and arrest by all means, either by sea or land, the vessels of his enemy. And this commission is taken out, and security put in not to trouble his Majesty's friends, of the Court of Admiralty, having relation to the Lord High Admiral and his office.

In this quality any man may make himself a captain if he put in the security aforesaid; but what abuses ensue thereof, I refer you to see in the First Book. This captain, after a ship is furnished, is to make choice of his master, officers, and company; and though he be styled the captain yet do they not use to obey him so strictly as him that has power from a General, as I have said before, for they receive no pay whereby to oblige them but every one goes upon his own adventure. And therefore they will tie the captain to the same conditions in his diet, or his part of any goods taken, as themselves are tied. His authority is little better than the captain in a pirate; for the interest and division of goods are alike, only that this captain has commission to take from an enemy, and a pirate takes without commission and makes all the world his enemies.

The authority of reprisals, and the law to warrant and limit them, has been ancient and ever since England enjoyed Aquitaine, if it were truly known; for the laws to this day are called the

Laws of Oleron near Rochelle, anciently possessed by the English.* And, because I speak of the peculiar laws there established, I am bound to give you an account of an ancient record extant in the Tower of London, wherein is to be seen that at a general meeting of all nations of Europe, that had relation to the sea, with one voice and consent they gave England the pre-eminence and power over all the seas, as well those that part England and France, as also the northern seas that encompass Scotland and Ireland. By which it is apparent the Kings of England did not challenge the privilege of masters of the sea by force, but by lawful right, granted by the consent of all the maritime towns in Europe.

The law of these actions of reprisal is to divide the goods taken from any enemy into three parts, the ship has one part, the victualler the other, the company the third, and the Lord Admiral to have the tenths of all.† That which is called pillage is the loose goods and apparel of the company on

* On Letters of Marque and Reprisal, and the growth of prize law in England, see R. G. Marsden in *Engl. Hist. Rev.* vol. xxiv. *et seq.*

† This was for single ships, but two or more might join in 'consortship' and agree to share 'jointly and severally, in sight or out of sight.' The proceeds of captures were then divided into thirds as before and each third divided by the tonnage and the number of men entitled to share. The amount payable to each ship would vary according to its tonnage and the number of the crew. For example, suppose the A. of 300 tons and 150 men, the B. of 250 tons and 125 men, the C. of 200 tons and 75 men, and the D. of 150 tons and 50 men, took prizes to the value of £5400. One-third of £5400 is £1800, and this, divided by the total tonnage (900), gives a unit of £2. The tonnage multiplied in each case by two (*e.g.* £600 for the A.) gives the amount gained by the owners. To get the men's shares, 1800 divided by 400, the total number of men, gives a unit of £4 10*s.*, therefore the 150 men of the

the upper deck, so that it exceeds not a certain proportion, and is equally to be divided to the whole company at the main mast. If a ship fight, the captain that takes her, by ancient right, should have the other captain's chest and what he has in it; and every officer to have the like of other officers. The captain is to have likewise the best piece of ordnance in the ship, the gunner the second, and the master the best cable, and all the other officers after that rate.*

The thirds due to the company is thus divided, and those that make the shares are, the master, or in his absence the right-hand mate, the gunner, the boatswain, and the four quartermasters, (not the captain). But the captain has this privilege, to take away half a share, or a whole share, to give from one to another as he pleases.

	Shares †
In the division, the captain has	10
The master	7 or 8
The lieutenant	7 or 8
The mates	5
The chirurgeon	5
The gunner	5

A. would take £675, those of the B. £562 10*s.*, the C. £337 10*s.*, and the D. £225. The third £1800 would be apportioned in an exactly similar way to the victuallers if they were independent speculators in fitting out the ships. The representatives of men killed in the fight, or who died of wounds subsequently, received their shares.

* This is rather incomplete. The captain would also hold to ransom the contents of the cabins of all gentlemen found on board the captured enemy; the master, the enemy's master, the plunder of his cabin and chest, and the second-best anchor and cable; the gunner, the other gunner's possessions and the best iron gun, and so on. See also *post*, pp. 201, 230.

† This list of shares differs in some respects from that given in Boteler's *Dialogical Discourse*, which is of about 1630.

	Shares
The boatswain	5
The carpenter	5
The trumpeter	5
The four quartermasters *	4
The cooper	4
The chirurgeon's mate	4
The gunner's mate	4
The carpenter's mate	4
The corporal	3
The quartermaster's mate	3
The trumpeter's mate	3
The steward	3
The cook	3
The cockswain †	3
The swabber	3

* The duty of a Quartermaster:—'To rummage in the hold of the ship upon all occasions; to accompany and overlook the steward when he delivers out the victuals to the cook, and when he serves and pumps the beer, and to take care that he commits no abuse nor waste. They are also to keep their watches when the ship's company is quartered, every quarter being to have one quartermaster at least in their watch, whether it be a quarter watch when the ship is in harbour and at anchor or half watch when it is at sea and in foul weather. These quartermasters are also to take their turns in the cunding of the ship, and to look to him at the helm that he be diligent in his steering, and to suffer none to be idling in the steerage that may disturb him and make him careless of his hand. To which end some of them are continually to keep a station upon the quarterdeck or half deck or at the round-house door or wheresoever they may best look to him at the helm and direct him' (*Sloane MSS.* 2449, f. 20).

† The master, boatswain, and coxswain carried whistles; it was no longer usual (*temp.* Car. I.) for captains to do so. Various incidental notices show that the cockswain had formerly been an officer of greater importance, perhaps when mediæval ships became supplied with two boats and he was in charge of one of them.

The younkers* are according to their deserts, some three, some two, and some less; the boys one single share.

A ship of war is to keep a man or boy continually in the head of the top of the mast, to descry what sails they can see; and upon the descrying of any that shall prove prize he is to have given him a reward at the discretion of the captain.

If any prize they take shall fight, and make resistance, upon the boarding her the first ten men that shall enter her shall have every one of them a reward at the discretion of the captain.

Though these actions of reprisals yield no profit to a King but only in his customs, as all other merchandizes that come into his kingdoms, yet it is a matter of great commodity and consequence, not only to him but to his whole commonwealth, as appears by these reasons—the number of sailors and seamen are increased treble by it, to what they are in the navigations of peaceable voyages; and they are made more courageous, and more warlike to serve their prince and country, when there is occasion to use them, than any other of his Majesty's subjects, although their successes do not prove prosperous at sea but return without spoil or gain. For, I confess, of twenty such ships as go out with letters of reprisal, not two, for the most part, make a saving voyage; like a lottery, where one lighting upon a good prize encourages others to venture in it till they make themselves penniless and derided for their pains. But howsoever it fall with these adventurous people the kingdom feels no detriment or

* Ordinary seamen. Cf. Captain John Smith's *Accidence for Young Seamen.*

scarcity by it; for all the time they spend at sea they consume no more victuals than they would have done on shore. Every man in the ship bears his own adventure, so that neither King nor country is bound to pay them at their return: nor, though they fail of getting in one voyage, yet upon the end of it they are ready, and never want occasion to be suddenly employed again in another.

And, lastly, the King receives benefit by these voluntary actions by annoyance done the enemy, who is impoverished and put into great discontent by it; besides that, many times, his provisions in furnishing his fleets are cut off in their way to the place of their rendezvous, whereby his preparations fail, to the great security and profit of the prince their enemy. But what the end of this stealth produces, you shall hear afterwards.*

The Office of a Master of a Ship of the King's.

A master is to be chosen by the election of the Trinity House, who can judge of every man's sufficience, as well in the point of his art as his command, which is as much to be regarded as the other in a ship of the King's. Upon commendations from them to the four Principal Officers of the Navy, he is to receive warrant for taking charge of his Majesty's ship. I utterly dislike that a captain should make choice of a master himself. I speak it for the security of a captain;

* From the point of view of civilization privateering has been described as licensed piracy into which, at the best, it had a tendency to degenerate. From the point of view of the Admiralty its drawback was its attraction for the seamen, thus rendering it much more difficult to obtain and keep men for the Navy.

for if any thing but well should befall the ship in her voyage it will be imputed to the captain's election of his master, and he only shall receive the blame and imputation by it.

His place and charge is to undertake to conduct the ship safe from port to port, and to direct at sea to and fro as the captain shall require him, by virtue of his Instructions from the Lord Admiral, in the King's service ; he is also to give chase, manage a fight, or retreat by the captain's directions. He has power to command the mariners and all the company to perform the ordinary labours in the ship and to keep due watch in their turns at the helm ; and may by himself, or the boatswain and his mates, correct and punish, according to the custom of the sea, such as refuse his command for the service of the ship, wherein I conceive no man is exempted respectively. He must be likewise acquainted what furniture, ground tackle, and sea stores, belong to the ship, and to justify the needful expenses of sea stores in the boatswain's or carpenter's charge during the voyage, to the end there may be warrant for supply while the ship is under his charge.

There are six things necessary and requisite in a master or mariner that takes charge, *viz.* the card, the compass, the tides, the time, the wind, and the ship's way.*

* The master, Boteler tells us, should allow too much dead reckoning rather than too little 'especially near land if that be true which seamen observe which is that their ships fly faster to the shore than from it, an observation which indeed may rationally be received (though the common mariner, I dare say, thinks nothing of it), because when a vessel from the sea makes towards the land she cometh with a continual motion whereby she makes her way the swifter ; but when she passeth from the shore her motion is but newly begun.'

A master must be obedient to his captain, and so carry himself, that he be obeyed by his company. For a contemptible master that has not authority in his command is slighted by all his men and the inferior officers, and then the service goes to wreck.

A master ought to pass through all the offices and degrees in a ship, before he attain to his place of master, that thereby he may both direct and control the other officers if they commit errors or mistakes. A master ought not to be arrogant, peremptory, wilful or headstrong; not to presume too much on his own skill, without the advice of his mates, who are to be chosen by him as his seconds and helpers to conduct the ship when he takes his rest; also to separate themselves into several parts of the ship at her tacking about, giving ear to the master's command and to see it performed; and also to oversee carefully such business as concerns the safety of the ship, *viz.* the anchor cleared, the splicing and bending of cables, that the shrouds be taut, *&c.* The boatswain employed to do these things may not neglect or perform them slightly, whereby any danger may come to the ship.

The office of a master is to guide a ship into what coast, height, or harbour the captain shall direct him, who is commander of all; and in a fight is to con the ship, and to see the handling of the sails, by appointment of the captain. A master must observe the sun and stars to find out the variation of the compass, to know the tides, to prick his card, and many other things, which, for the better instruction of him that shall hereafter attain to that place, I have set down briefly for them to learn and follow; as namely, the working of the sun with the north and south

declination; a rule to know the age of the moon, and so consequently to cast the tides; how many leagues answer to a degree; the prime, the golden number, who was the finder out of the loadstone, and the winds called monsoons.

*How to work the Sun with a North Declination.**

The height is 87 Degrees, 54 Minutes.†			
	23 19	46 11	13 12
	21 13	23 2	12 20
	2 6	23 9	1 2
	89 60	89 60	89 60
	2 6	23 9	1 2
	87 54	66 51	88 58

How to work the Sun with a South Declination.

23 19	46 11	13 22
21 13	23 2	12 20
44 32	69 13	25 42
89 60	89 60	89 60
44 32	69 13	25 42
45 28	20 47	64 18

* These tables are highly technical and the calculations are very rough ones.

† *I.e.* the latitude of the observer.

A Rule to know the Age of the Moon, and so to cast the Tides.

23	19	26	2	9	12	28	13	*The Day of the Month.*
14	2	6	13	29	3	25	2	*The Epact.*
9	4	8	11	7	4	4	3	*The Months from March.*
46	25	40	26	45	19	57	18	
30		30		30		30		
16		10		15		25		

*Leagues to answer a Degree.**

North	20
North and by east . .	$20\frac{1}{3}$
North-north-east . .	$21\frac{1}{3}$
North-east and by north .	24
North-east . . .	$28\frac{1}{3}$
North-east and by east .	36
East-north-east . .	$52\frac{1}{2}$
East and by north . .	$102\frac{1}{3}$

It is to be noted, that the north-east winds, which continually blow betwixt the Canaries and West Indies, blow so from the sixth or seventh degree on this side the line, to the thirtieth and thirty-second degrees ; and, moreover, of late it has differed, for sometimes the wind .blows

* *I.e.* the distance in leagues to be run on any course before the latitude is altered one degree.

southwardly in those heights, though I confess it is strange.*

Flavio Gioia, of Amalfi, in the kingdom of Naples, was the first finder of the loadstone, in the year 1300.†

In October the north-east, and east-north-east winds blow on the coast of Brazil, and from March to October they blow at south-east; and these are called the general winds.

The monsoons,‡ that is to say the fixed winds in the East Indies, have their beginning from Mozambique to Goa in the month of September; and the second monsoon, from thence, begins the twenty-fifth of December. The third begins the fifteenth of August. The prime, or golden number, is the time of nineteen years, in which time the moon makes all her changes or conjunctions with the sun; and when these nineteen years are expired, then she begins again. As for example, the year 1579 she changed the 22d of March, and every year alters eleven days in her change, till the year 1598, and then she changeth the said 22d of March again.§

* Presumably Monson meant that the S.E. Trades are sometimes met further north than at other times, which is the case in August; or he may mean that the S.E. Trades often haul south as far as S.S.E. near the Equator. The recognized limits of the Trades are between 7° and 30° N. for the N.E., and 3° N. and 25° S. for the S.E.

† It was in use earlier. See Nicolas, *Hist. of the Royal Navy*, i. 248; Jal, *Archéologie Navale*, i. 204.

‡ Supposed to be from the Arabic *mausim*, season (*New Eng. Dict.*). The particulars in the text seem to be taken from John Eldred's travels (*Hakluyt* (ed. 1903), vi. 28).

§ The invention of the golden number is ascribed to Meton of Athens about 432 B.C. To find the golden number add one to the date and divide by nineteen; the remainder is the number.

Every moon contains twenty nine days, twelve hours, forty four minutes,* from change to change; the whole contents of the hours of the moon, seven hundred and eight hours, and forty four minutes.

There is in every year twelve changes of the moon; and the year contains three hundred and sixty five days, five hours, fifty five minutes, thirteen seconds.†

In the year of twelve lunar months there are but three hundred and fifty four days,‡ so that there are eleven more in the solar year, than in the twelve lunar months.

From January to June you shall see the moon within twenty four hours after the change because she has a north declination of the sun. From July to December you shall not see the moon three days after the change because her declination is to the southward of the sun; but you may see her in twenty four hours before her change.

The golden number was so called because it was sent out of Egypt in letters of gold to the Romans, or the city of Rome. The reason of calling it the prime was because it was the first order the moon's course was known by.

An English mile contains a thousand paces, and every pace five foot, and every foot twelve inches.§

The lengthening and shortening of the days, is according to the swiftness and slowness of the sun's declination. In the latitude of London, the shortest day is the eleventh or twelfth of

* And 2·87 seconds.

† Forty-eight minutes, 46 seconds.

‡ And eight hours, 48 minutes.

§ It need hardly be said that the English mile contains 5,280 feet. The 'geometrical pace' of 5 feet was used by artillerists in their gunnery calculations.

December ; the longest summer's day is sixteen hours and a half, the shortest seven and a half, from the rising to the setting of the sun.*

The 12th of December the sun rises a quarter of an hour after eight, and sets a quarter before four.

The 29th of December the day is a quarter of an hour longer, and rises at eight, and sets at four.

The 17th of January the day is an hour longer ; the 29th the sun rises at half an hour after seven, and sets at half an hour after four.

The 12th of February the day is ten hours long ; the sun rises at seven, and sets at five.

The 20th of February the day is eleven hours long ; the sun rises at half an hour after six, and sets at half an hour after five.

The 12th of March the day is twelve hours long all the world over : the 24th of March the sun rises a quarter of an hour before six, and sets a quarter after six.

The 7th of April the day is fourteen hours long, and the sun rises at five, and sets at seven.

The 23d of April the day is fifteen hours long ; the sun rises before five half an hour, and sets at half an hour after seven.

The 15th of May the day is sixteen hours long ; the sun rises at four, and sets at eight.

The 11th or 12th of June the sun has its greatest height to the northward ; the day is sixteen hours and a half, and the sun rises a quarter before four, and sets a quarter after eight.

The 10th of July the day is fifteen hours.

The 16th of August the day is fourteen hours.

The last of August the day is thirteen hours.

The 12th of September equal.

* In reading these dates the alteration of the calendar in 1752 must be borne in mind.

The 27th of September the day is eleven hours.
The 11th of October ten hours long.
The 26th of October nine hours long.
The 15th of November eight hours long
The 11th of December at shortest.

*The Office of a Pilot and Coaster.**

He is to carry the ship over certain sands, or into such ports and harbours as the master is not acquainted with, at which time the master himself ought not to control him but to follow the course and directions of the pilot; though the managing and tacking of the ship belongs to the master.

I give the name both of pilot and coaster to one man, for the first is comprehended in the latter. A bare pilot serves only for the port he is hired for; but the coaster serves not only for such a place but for the whole coast, as I will make the comparison of England.

This man's charge is more than in the command of ship and company, and is of greater weight and moment than the office of a master, for by reason of our daily experience in long voyages the conduction of a ship is of little difficulty. For it has not been heard for many years that any ship ever went out of England, and returned home again without finding the country or place she went for; and yet we have very many lamentable precedents that, coming home from such

* It has been remarked (*ante*, iii. p. 394) that in the mediæval period the pilot was a ship's officer, but local pilots must have been required as soon as oversea voyages were made and there are early references to them. The earliest English records relating to local pilotage are those of the Cinque Ports.

voyages, for want of knowledge of the coast the ships have perished.

The principal thing in a pilot or coaster of our coast is to know where he is. By his first soundings his depth will give him light; and as he draws nearer the coast, either of England or Brittany, his depth will lessen, and by his lead he will take up sands by which he shall gather which of the two coasts he is upon, as also if he be shot into St. George's Channel. The meanest mariner that trades to Rochelle, Bordeaux, Biscay, Portugal, and Spain, knows more in this kind than the great masters and others that go to the East Indies and long voyages, because they make four or five voyages in and out of our Channel to the others' one, by which they gain daily experience of our soundings, coasts, marks on land, and the entrance of our harbours, which the others cannot do. The skill of a coaster is to know the land as soon as he shall descry it; and after he has made it then to harbour himself for all ports are alike to a good coaster. He must be likewise perfect in casting the tides to take his opportunity of coming into a harbour, according to the draught of his ship and the depth of the water.

In 1588, when the Duke of Medina Sidonia came for England, had he been furnished with a pilot that knew the Lizard, when he made it for the Ramehead, he had the next morning given an attempt upon our ships at Plymouth, when he was not suspected or looked for.

Mr. Cavendish, at his return from about the world, where he made himself and the nation famous by that voyage, has often told me that the first night he entered into our Channel, not daring to put in with the land, he endured more trouble and danger of shipwreck than in all his

two years and odd months of navigation in the remote and unknown places where he had been.

In the year 1589 we being come in the Victory, one of the Queen's ships, with the Earl of Cumberland, (as may appear in the First Book) near Scilly, by our reckonings, were taken with a most violent storm at east that put us upon the coast of Ireland, where, for want of a man that knew that coast and harbours, we were forced to keep the sea till we were put from shore ; so that before we could recover it again we endured such great misery and want of drink that the like has not been known, as you will find in Mr. Hakluyt's book treating of the English voyages.* I could insert many other examples of this nature, but this shall suffice.

The Office of a Boatswain.

Is to have the charge of all the cordage, tackling, sails, fids, and marline spikes, needles, twine, sailcloth, and rigging the ship. His mates have the command of the long boat, putting out the anchor and fetching it home, wafting, towing, and mooring, and to give an account of his store indented with a surveyor for the same. He is to make choice of his mates to assist him, his place being more laborious than one man can perform, in following and directing the common sailors in their works. If he die in the voyage his chief mate is to succeed him.

As the master is to be abaft the mast so the boatswain, and all the common sailors under his command, are to be afore the mast. He messes the company four and four to a mess, or more

* See *ante*, i. p. 236.

if there be want of victuals, and is to see they be duly served, and good hours kept. At eight of the clock at night the watch is to be set, and half the company watches and the other half sleeps till twelve of the clock that they are relieved, unless foul weather force them all to help together.

As the master commands the tacking of the ship, the hoisting or striking the yard, the taking in or putting forth the sails, upon the winding of the master's whistle the boatswain takes it with his, and sets the sailors with courage to do their work, every one of them knowing by their whistle what they are to do. The boatswain is to see the shrouds and all other ropes set taut, the deep sea line and plummet in readiness against their coming into the soundings, and tallowed; this is only in deep water before they make land. He is to see the cables bent to the anchors. In a fight he must see the yards slung, top-armours and waist cloths, the flag and pendants put forth, and call up every man to his labour and office. The boatswain serves for a provost-marshal to commit all offenders. And to conclude, his and his mate's work is never at an end, for it is impossible to repeat all the offices that are put upon them.

The Office of a Gunner.

A gunner at sea ought to be skilful, careful, and courageous, for the strength of the ship is put into his hands.

A principal thing in a gunner at sea is to be a good helmsman, and to call to him at helm to loof, or bear up, to have his better level, and to observe the heaving and setting of the sea to take his aim at the enemy.

A gunner is to be provided, besides his ordnance, with powder and shot of all kinds, firepikes, cartridges, case shots, cross-bar shot, langrel shot, chain shot, armed arrows of wild fire, and grenades of divers kinds.* He is to furnish himself with a horn, a priming-iron, lint-stocks, gunner's quadrant, and a dark lanthorn; to make choice of his mates, his quarter

* For firepikes see *ante*, iii. p. 44. Cartridges were of paper, fustian, or canvas, a piece being cut away under the touch-hole when about to be used; in action they were, for safety, carried about in latten cases, and, in length, were for culverins, falcons, minions, and sakers four times the diameter of the shot, and for cannon two and two-thirds the diameter. Sir John Davies, writing to Essex in 1598, says that the charge of powder should be of the same weight as the shot, whereas it was customary to use a fourth less and that that was the reason so many shot fell short at Cadiz (*Add. MSS.* 6177, f. 55). The Spaniards, however, remarked that the English gunnery there was very effective (*ante*, i. p. 386) in comparison with their own. In loading, a wooden tampion was placed next to the cartridge, then a wad of tow, untwisted rope, hay, or straw, then the shot, and, if the gun was laid depressed, another wad (Tartaglia, *Three Bookes of Colloquies Concerning the Arte of Shooting*, Lond. 1588, p. 46). Arrows of wildfire were made on the same principle as firepikes. The earliest reference in the *New Eng. Dict.* to cross-bar shot is of 1557, but they are probably the 'shott of yron wyth pyks' forming a portion of the gunner's stores of the Sovereign in 1515 (*Chapter Ho. Bks.* xiii.); a year earlier they are described still more precisely, 'shot of iron with cross bars' (*L. and P. Hen. VIII.* i. 5721). Captain John Smith says (*Seaman's Grammar*, 1627), that langrel 'runs loose with a shackell to be shortened when you put it into the piece'; later, langrel, or langridge, and case shot were much the same. Grenades, filled with powder and shot and meant to explode, were of copper, tin, latten, or cast iron; others, intended to set fire to the target, were of canvas covered with a mixture of pitch, saltpetre, and sulphur. On land, to obtain a light at night for a sufficient length of time to watch an enemy, composition balls of flax, turpentine, saltpetre, and charcoal were used.

gunners, yeoman of the powder room, and his company in the gunner-room, who are privileged from the labour before the mast unless by his sufferance.

A gunner must know the names of his pieces, their bores or height, their weight, the weight of the shot, the weight of the powder, the goodness of powder, and how far every piece will carry, both at random and point blank, which is fittest for a ship, and which for land or battery. But because every gunner does not know these secrets I will set down so much as is fit for them to know.*

* The following table has been corrected from other sources, the MSS. used for collation being full of obvious clerical errors. But in any case there cannot be much certainty in any of the figures found in contemporary lists as they all vary in some respects; this one may be compared with *Lansd. MSS.* 113, f. 117, and the printed one in Captain John Smith's *Accidence for Young Seamen.* The translator of the 1588 edition of Tartaglia's *Arte of Shooting* writes, 'through the intolerable fault of careless or unskilful gunfounders all our great pieces of one name are not of one length nor of one weight, nor of one height in their mouths, and therefore the gunners' books and tables which do show that all our great pieces of one name are of an equal length, and of an equal weight, and of an equal height in their mouths, are erroneous.' In the theory of gunnery and gun-founding, and in scientific observation, the Spaniards and Italians were far in advance of the English, although English guns were in demand all over Europe; but they were no more definite in their practice than the Elizabethans. A Spanish artillerist says, 'there has been much controversy about the length of pieces because in past times it was a generally received opinion that the longer the piece the greater the range and so we see a great want of uniformity in size, and many for this reason of little or no utility. Although to prove the proposition would take much space and time the truth is that a piece loses as much by being too long as too short . . . the true length to give a piece is such that the

A Cannon Royal.

The bore of a cannon royal is eight inches and a half.
The weight eight thousand pounds.
The weight of the shot sixty six pounds.
The weight of the powder thirty pounds.

ball shall leave it the instant that the powder has burnt up' (Diego de Alaba y Viamont, *El Perfeto Capitan Instruido*, Madrid, 1590). Under Charles I. the gunfounders used so much unnecessary metal that foreign purchasers rebored the guns for larger shot. There were laid down, however, certain definite rules which were supposed to be followed in the matter of weight and length, but there were many sub-varieties of guns which are not mentioned here; for instance, there were four kinds of demi-cannon, three of culverins, and three of demi-culverins, and as each of these carried a ball of different weight a large loophole was left for the irregularities of the gunfounder. Roughly, for culverins and smaller pieces, the length was 32 times the diameter of the bore at the mouth, and the weight 242⅔ lbs. for every pound the bullet weighed. But a demi-cannon was from 21 to 25 times, and a basilisk from 24 to 31 times the bore in length; in metal both weighed 161¾ lbs. for every pound-weight of shot. In theory, the diameter at the breech was three times the diameter of the shot, and, at the mouth, twice its diameter. There were smaller breechloading, or 'chamber' guns-slings, fowlers, bases, portpieces, passavolantes, &c.—furnished with two or three removable chambers to carry the powder charge; the chamber was locked in with a wooden wedge or iron pin, and the gun was mounted, usually, on a swivel. Revolving guns, very much resembling an early type of Colt's revolver, and carrying a shot of about one pound in weight, were also used, but were more common abroad than here; there is a very fine example in the museum of the Arsenal at Venice. There was an attempt, also, to obtain the equivalent of machine guns, known during the first half of the sixteenth century as 'organs.' They consisted of a double or triple row of barrels, of hand-gun calibre, arranged horizontally and carried on a wheeled cart. They may be the same as the *ribaudequins* of the fourteenth

The breadth of the ladle thirteen inches.
The length of the ladle twenty four inches.
She will shoot point blank sixteen score paces.*
She will shoot at randòm one thousand nine hundred and thirty paces.

A Cannon.

The bore of a cannon eight inches.
The weight six thousand pounds.
The weight of the shot sixty pounds.
The weight of the powder twenty seven pounds.
The breadth of the ladle twelve inches.
The length of the ladle twenty four inches.
She will shoot point blank seventeen score paces.
She will shoot at random two thousand paces.

A Cannon Serpentine.

The bore seven and a half inches.
The weight five thousand five hundred pounds.
The weight of the shot fifty three pounds and a half.
The weight of the powder twenty five pounds.
The breadth of the ladle ten inches.
The length of the ladle twenty three inches.
Shoot point blank twenty score paces.
Shoot at random two thousand paces.

century; they appear to have gone out of use before the end of the sixteenth. Great guns were of cast iron or brass; the smaller varieties were usually of forged iron. The tendency in the sixteenth century was to design new guns to meet all new conditions as they occurred, probably the result of the, relatively, limitless field of greater power apparently opened up by the use of cast pieces. Gunnery was in its period of evolution and was not near the stage when the advantages of simplification of class are recognized.

* *I.e.* 1600 feet; see *ante*, p. 28, note.

*A Bastard Cannon.**

The bore seven inches.
The weight four thousand five hundred pounds.
The weight of the shot forty one pounds.
The weight of the powder twenty pounds.
The breadth of the ladle ten inches.
The length of the ladle twenty three inches and three quarters.
Shoot point blank eighteen score paces.
Shoot at random one thousand eight hundred paces.

A Demi Cannon.

The bore six inches and three quarters.
The weight four thousand pounds.
The weight of the shot thirty pounds and a half.
The weight of the powder eighteen pounds.
The breadth of the ladle nine inches and a half.
The length of the ladle twenty three inches and a half.
Shoot point blank seventeen score paces.
Shoot at random one thousand seven hundred paces.

A Cannon Petro.†

The bore six inches.
The weight three thousand pounds.
The weight of the shot twenty four pounds and a half.

* Bastard pieces were shorter in the chase than normal guns of their type.

† Or pedrero, or perier. The original pedrero fired stone shot only and was nearer in character to the mortar than the cannon, being only from 8 to 12 diameters in length. As a stone gun the powder charge was but one-third of the weight of the ball, there being always the risk of blowing

The weight of the powder fourteen pounds.
The breadth of the ladle nine inches.
The length of the ladle twenty three inches.
Shoot point blank sixteen score paces.
Shoot at random one thousand six hundred paces.

A Culverin.

The bore five inches and a half.
The weight four thousand five hundred pounds.
The weight of the shot seventeen pounds and a half.
The weight of the powder twelve pounds.
The breadth of the ladle eight inches and a half.
The length of the ladle twenty two inches.
Shoot point blank twenty score paces.
Shoot at random two thousand five hundred paces

*A Basilisk.**

The bore five inches.
The weight four thousand pounds.
The weight of the shot fifteen and a half pounds
The weight of the powder ten pounds.

the stone to pieces, and the gun itself contained 81 lbs. of metal for every pound-weight of shot and was therefore comparatively weak. It seems to have been adapted as an iron shot gun during the reign of Elizabeth. The Spaniards used it with fragments of chain, or any odd material, to get the effect of the later grape and shrapnel. The iron-shot pedrero was 'chamber-bored,' that is to say that portion of the bore which contained the powder charge was of less diameter than the remainder, a principle adopted in all guns in which the proportion of powder was low in comparison with the size and weight of the shot. Somewhat later in the seventeenth century such pieces were called 'drake or taper-bored.' Their advantage was that there was less recoil with them than when the bore was of uniform diameter.

* The true basilisk was a Turkish gun and fired a stone ball of from 150 to 200 lbs.

The breadth of the ladle seven inches and a half.
The length of the ladle twenty two inches.
Shoot point blank twenty score paces.
Shoot at random three thousand paces.

A Demi Culverin.

The bore four and a half inches.
The weight three thousand four hundred pounds.
The weight of the shot nine pounds and a half.
The weight of the powder eight pounds.
The breadth of the ladle six inches and a half.
The length of the ladle twenty two inches.
Shoot point blank twenty score paces.
Shoot at random two thousand five hundred paces.

A Bastard Culverin.

The bore four inches.
The weight three thousand pounds.
The weight of the shot seven pounds.
The weight of the powder five pounds and three quarters.
The breadth of the ladle five inches and a half.
The length of the ladle eighteen inches.
Shoot point blank eighteen score paces.
Shoot at random one thousand seven hundred paces.

A Saker.

The bore three inches and a half.
The weight one thousand four hundred pounds.
The weight of the shot five pounds and a half.
The weight of the powder five pounds and a half.
The breadth of the ladle five inches and one third.
The length of the ladle eighteen inches.
Shoot point blank seventeen score paces.
Shoot at random one thousand seven hundred paces.

A Minion.

The bore three inches and a quarter.
The weight a thousand pounds.
The weight of the shot four pounds.
The weight of the powder four pounds.
The breadth of the ladle four inches and a third.
The length of the ladle seventeen inches.
Shoot point blank sixteen score paces.
Shoot at random sixteen hundred paces.

A Falcon.

The bore two inches and a half.
The weight six hundred and sixty pounds.
The weight of the shot two and a quarter pounds.
The weight of the powder two pounds and a quarter.
The breadth of the ladle four inches and a half.
The length of the ladle fifteen inches.
Shoot point blank fifteen score paces.
Shoot at random one thousand five hundred paces.

A Falconet.

The bore two inches.
The weight five hundred pounds.
The weight of the shot one pound and a half.
The weight of the powder one pound and a half.
The breadth of the ladle four inches.
The length of the ladle ten inches.
Shoot point blank fifteen score paces.
Shoot at random one thousand five hundred paces.

A Serpentine.

The bore one inch and a half.
The weight four hundred pounds.
The weight of the shot three quarters of a pound.
The weight of the powder a pound and a half.
The breadth of the ladle three inches and a half.
The length of the ladle eleven inches.
Shoot point blank fourteen score paces.
Shoot at random one thousand four hundred paces.

A Robinet.

The bore one inch.
The weight three hundred pounds.
The weight of the shot half a pound.
The weight of the powder a third part of a pound.
The breadth of the ladle an inch and a third part.
The length of the ladle six inches.
Shoot point blank twelve score paces.
Shoot at random a thousand paces.

Notwithstanding these proportions of powder given to every piece aforesaid yet there must be respect had to the goodness or badness of powder, as, namely, serpentine powder which is weak and will not keep at sea; the great and gross powder is for ordnance; fine corned powder is in goodness according to the saltpetre.* And

* The proportions of the ingredients used for gunpowder differed not only in the various countries but in the same country as experimental changes were made, and depended largely on the ideas of the artillerist of the moment in whom most confidence was placed. The characteristic of mediæval powder was the large quantity of solid residue after firing due to the incomplete combustion. The manufacture of powder in England on a large scale began shortly after the accession of Elizabeth, but there was much difficulty in obtaining a native supply of saltpetre and there are many suggestions on the subject in the State Papers. Serpentine was a fine powder; it was

for the shot, it must be a quarter of an inch less than the bore of the piece.

No ship commonly carries greater pieces than a demi cannon. The rest of her pieces ought not to be above seven or eight foot long, unless it be in the chase or stern : they are easier in charging, easeful to the ship, besides better in traversing and mounting. The longer the pieces are the greater is their retention of fire, and the danger of the piece the greater. It is true the longer piece will burn the powder better and carry the shot farther, as the shorter piece will spue her powder. The longer is better for the land, the other for the sea ; for he that shooteth far off at a ship had as good not shoot at all.

It is a folly to try a piece, either great or small, with a double charge. For a piece is proportioned to her metal, equal with the charge of her powder ; and though a piece should endure a double charge yet she is the weaker by the proof, and made the crazier by it.

Taper-bored, is when a piece is wider in the mouth than towards the breech, which is dangerous, if the bullets go not home, to burst her.* Honey-combed, is when she is ill cast, or over much worn ; she will be ragged within, which is dangerous for a cross-bar shot to catch hold by, or any rag of her wadding being afire, and sticking there, may fire the next charge you put in her.

the strongest and was the one chiefly used for great guns during the sixteenth century, but, as Monson remarks, it kept badly at sea and was going out of use in favour of corned powder. There were two kinds of corn powder, fine and coarse, of which the former was one-fourth stronger than the latter, which, however, was used for heavy ordnance.

* See *ante*, p. 39, note.

Fireworks are divers, and of many compositions, as arrows trimmed with wildfire, pikes of wildfire to stick burning into a ship's side to fire her. There are also divers sorts of grenades, some to break and fly in abundance of pieces every way, as will your brass balls, and earthen pots, which, when they are covered with quarter bullets stuck in pitch, and the pots filled with good powder, in a crowd of people will make an incredible slaughter. Some will burn under water, and never extinguish till the stuff be consumed; some will burn and fume out a most stinking poisonous smoke; some being only of oil, anointed on any thing made of dry wood, will take fire by the heat of the sun when it shines hot.*

It is not impertinent to make repetition of a great abuse, and the greatest of all others that could befall this happy kingdom, which God has placed in such a place of the world that all the enemies of mankind cannot annoy it from abroad if the kingdom be well governed, the people encouraged, and the arms and strength of the land prohibited from being carried abroad. But such has been the oversight of some magistrates in times past that they have connived at the transportation of our English ordnance, which exceeds all other in Europe for goodness. And now no country, from the hithermost parts to the uttermost bounds of the world, but is able to give testimony of it in their forts and castles, which are stuffed and fortified with them, to the unspeakable

* Tartaglia and others give several complicated recipes for the preparation of these compounds. They do not read very convincingly, and probably some innocent person was blamed when they were used with disappointing results. Gunners were, very wisely, recommended to go ashore to make their fireworks, 'or otherwise into sea far from the ship.'

hazard and danger to ourselves. Besides that, it breeds a double charge and expense to his Majesty, as shall appear by this that follows :—A French ship, of five hundred tons, carries forty pieces of English ordnance, for which the King has 500*l.* for licence of transportation. To command this ship, the King of England must keep yearly another bigger and stronger than she, which will cost 3000*l.* per annum at the least, and the charge to maintain her in harbour will stand him in 400*l.* a year; so that for the profit of 500*l.* this great charge must be maintained, which by keeping our ordnance will be avoided.*

The ordnance of England have been sold for 12*l.* a ton ; in Amsterdam for 40*l.*, in France for 60*l.*, and in Spain for 80*l.*, all in one year. For it is to be noted that the English ordnance is of another nature than the ordnance made in Biscay, which break and shiver into many pieces, to the destruction of men on board the ship.

The Carpenter's Office.

I will enlarge upon this office more than on the rest because he is the man that gives life to the ship ; for all the works that iron or timber is used in pass through his hands and skill. He looks to the hull of the ship, that there be no damage

* All through the reign of Elizabeth, and during the early seventeenth century, efforts were made by Orders in Council and other measures to prevent the export of English ordnance. Gunfounders and shipowners were required to give sureties not to export or to sell abroad, but with little result. Monson, it will be noticed, speaks plainly of connivance on the part of those who should have enforced the prohibition. The argument in the text is copied from William Sanderson's 'Treatise of a State Merchant' (*Harl. MSS.* 2204). I am not aware that Sanderson's treatise has been printed; it is not among the printed books in the British Museum Library.

by leaks within board or without, but that all be tight and staunch; likewise to the strength of the masts and yards, and repairing of the boats, cabins, or partitions of plank, deal, sheet-lead, nails for work, *&c.*

What concerns the Building of a Ship.

The keel, the stern * and stern-post, is the ground on which a ship is built and derived.

The ground timbers is the floor of the ship, and are called the wrung-heads.

Your keelson is laid over your floor timbers; it is a long timber like the keel, and lies within as the keel lies without; from it all the upper works are raised.

The ribs of a ship are like the ribs of a man; the sleepers run fore and aft on each side of the ship.

The spurkets are the spaces betwixt the timbers along the ship's sides in all parts.

The garboard is the first plank next the keel on the outside.

The garboard strake is the first seam next the keel.

The run of a ship is that which comes narrower by degrees from the floor timbers along to the stern post, called the ship's way aftward. For according to her run, she will steer well or ill, according to the swiftness or slowness of the water coming to the rudder.

The fore end of a plank under water is called the butt end; the planks that are fastened to the stern are called the woodings.†

The tuck is the gathering of the works upon the ship's quarter under water; if it lies low it makes her have a fat quarter and hinders the quick passage of the water to the rudder.

* Qy. stem. † Wood-ends or hoodings.

The transom is a timber that lies athwart the stern, and lays out the breadth of the ship at the buttock, which is her breadth from her tuck upwards.

The rake of a ship is so much of her hull as hangs over both the ends of her keel; it gives the ship good way and makes her keep a good wind; the rake forward is near half the length of the keel.*

The ships bilge is the breadth of the floor when she is ashore; the bilge water is that which cannot come to the pump.

The main beam is next the main mast, where is the ship's greatest breadth.

Riders are binders from the keel to strengthen all, and the orlops do not lie upon them.

The beams of the orlops are to be bound with knees, which are the best that grow crooked naturally.

Clench-bolts are clenched with a riveting hammer for drawing out.

A flush deck is that which lies upon a right line from stem to stern, fore and aft.

The gunwale is the uppermost wale that goes about the uppermost straight or seam of the uppermost deck, about the ship's waist.

The ship's quarter is from the mizen mast aft.

Carling knees are timbers that come athwart the ship from the sides to the hatch way betwixt

* This is incorrect. The forward rake of Elizabethan men-of-war was seldom much more than a third of the length of keel. The Triumph and the Ark, with 100 feet of keel, had 37 and 33½ feet rake; the White Bear and the Merhonour 110 feet of keel and 36 and 37 feet of rake (*Add. MSS.* 9336, f. 10). The Leopard and Swallow of Charles I., with 95 and 96 feet of keel were given 30½ and 28¼ feet of rake (*S. P. Dom. Chas. I.* cclxxviii. 41, i.) The after rake was not more than six feet in the largest ships.

the two masts, and bear up the deck on both sides, and on their ends lieth the coamings of the hatches.

Coamings are timbers that bear up the hatches higher than the deck, and keep the water from falling in at the hatches; and they make loopholes in them for close-fights; and they are an ease to men where the decks are low.

The knights belong to the halyards.

The kevels are to belay the sheets and tacks upon them.

The spindle is the main body of the capstan.

The whelps are short pieces of wood made fast to it to keep the cable from coming too high in turning about.

The jeer capstan is a help to the great capstan in hoisting and weighing.

The voyol is fastened together at both ends, with an eye or two and a wall-knot, seized together.

A manger is a plank before or abaft * the main-mast. The bitts are two pieces of great timber, and the cross-piece goes through them; they are placed abaft the manger in the ship's luff † to belay the cable at anchor; the lower parts are fastened to the rider.

The cat is a short piece of timber over the hawse, to which is fastened a great hook of iron to trice up the anchor from the hawse to the forecastle.

* *Sic.*

† In the technology of the period the luff was that portion of the deck between the chess-trees and the forecastle bulk-head—practically it was the widest portion of the forecastle where it begins to fine off to the stem. The statement about the positions of the manger and the bitts is, like most of this section, copied from John Smith's *Seaman's Grammar,* but seems to require some further explanation. At any rate by the end of the seventeenth century the manger was always on the forecastle.

The bulkhead is against the gun room, the cabin, the bread room, the quarter deck, or other such division.

The davit is a short piece of timber by which they haul up the anchor's fluke to the ship's bows.

The cobridge head are placed murderers ; * they make close the forecastle and half deck.†

Sockets are the holes the pintles of the murderers go into.

The lower counter is betwixt the lower part of the gallery and the transom ; the upper part is from the gallery upward.

Cat-holes are over the ports in the gun room, right with the capstan to heave the ship astern by a cable or hawser, called a stern.

A ship of four hundred tons, requires a plank of four inches ; of three hundred tons three inches ; small ships two inches, but no less.

For clamps, middle bands, and sleepers, they are of six inches plank for building them ; the rest upwards three inches.

If a ship be of four hundred tons, lay the beams of the orlop ten foot deep in hold, and all the beams to be bound with two knees at each end.

The orlop to be laid with square three-inch plank, and all the planks to be trennelled ‡ by the beams.

It is very necessary to have a spare rudder carried in a ship, as is used by the ships in the South Sea.

* Small swivel guns to sweep the waist if boarded.

† *I.e.* the cobridge heads, proper, were the forecastle and half deck bulkheads.

‡ Treenailed.

A Rule to know the Burden of a Ship.

Length of the Keel.	*Breadth in Beam.*	*Depth in Hold.*
120	40	20
	20	
	00	
	80	
	800	
	120	
	000	
	1600	
	800	

The burden 960 tons.

Length of the Keel.	*Breadth in Beam.*	*Depth in Hold.*
63	21	11
	11	
	21	
	21	
	231	
	63	
	693	
	1386	

The Burthen 145 Tons.*

* That is, multiply the depth by the breadth, the result again by the length of keel and divide by 100. The measurement of ship tonnage grew out of the Bordeaux wine trade so that mediæval vessels were measured by their carrying capacity in tuns of wine; it was therefore actually experimental in each case. Perhaps there was some method of

The Masting of a Ship.

After this proportion you may estimate the masting of ships : suppose a ship of three hundred tons be twenty nine feet by the beam ; if her mast be twenty four inches diameter the length of it must be twenty four yards, for every inch in thickness is allowed a yard in length.* And the fore mast being twenty two inches in thickness must be twenty two yards in length.† The boltsprit, both in length and thickness, must be equal to the fore mast.‡ The mizen seventeen yards in length and seventeen inches diameter : but in a

measurement for ships not engaged in the wine trade, or it may have been guessed at by comparing them with other vessels of the same size whose carrying capacity was known. The first theoretical method was evolved by Mathew Baker, a dockyard master shipwright, in 1582 and is the one in the text ; one-third was added to obtain the gross tonnage. Much discussion raged during the reign of Charles I. as to how the measurements should be taken and what figure was the true divisor ; there was an Order in Council of 26 May 1628 that all the King's ships, and those hired by him, were to be measured by taking 'the length of the keel leaving out the false post, the greatest breadth within the plank, the depth from that breadth to the upper edge of the keel, multiplying these and dividing by 100.' There have been many rules during the centuries which have elapsed since then, and the question can hardly be considered finally closed even now.

* Monson does not tell us why the mast should be 24 inches in diameter. To obtain the theoretical length the depth of the ship was added to the breadth, the sum doubled and divided by three ; the quotient, after deducting from it so many feet as the breadth was above 20, was the length of the mast in yards. There were, however, several methods in use, some simpler, of obtaining the size of masts and spars for a ship of given tonnage.

† The fore mast was three-fourths of the length of the main mast.

‡ Half the main mast.

made mast, which is greater, this rate will not serve.* The mizen mast is half the length of the main mast, which to twenty four will be twelve.

As you take the proportion of the masts from the beam, so you must the length of the yards by the keel.

A ship that is seventy nine feet by the keel, her main yard must be twenty one yards in length, and in thickness but seventeen inches.† The fore yard nineteen yards long, and fifteen inches in diameter.‡ The spritsail yard sixteen yards long, and nine inches thick. The mizen yard as long as the mast.

The top yards bear half the proportion to the main and fore yards,§ and the top-gallants half to them.

All these observations are not exactly to be followed, but much after this proportion; for there are many other rules to this point to be observed.

The several Ways of Sheathing Ships in Spain and Portugal.

In Spain and Portugal they sheathe ships with lead; not durable, heavy, and subject to many casualties.

* The main mizen half, the bonaventure mizen a fourth, of the main mast.

† The main yard should be five-sixths of the keel length and have three-quarters of an inch diameter for each yard of length.

‡ The fore yard four-fifths of the main yard, as also the sprit sail and crossjack yards.

§ Rather two-fifths.

Another sheathing is with double planks within and without, like a furring ; weighty, endures but a while because the worm works through the one and the other.

Some have done it with fine canvas ; of small continuance, and not regarded.

To burn the upper plank, till it come to be like a very coal in every place, and after to pitch it, is not amiss.

In China, they say, they have a bitumen, or varnish, like an artificial pitch, with which they trim the outside of the ships. It is said to be durable against worm, water, or sun.

Some have used a certain pitch mingled with glass and other ingredients beaten to powder ; but of no great use.

The best is with thin boards, half inch thick, the thinner the better, and elm better than oak for it does not split, it endures better under water and yields better to the ship's side. The manner is thus ; before the sheathing-board be nailed on, upon the inner side of it they smear it over with tar, half a finger thick, and upon the tar another half finger thick with hair, such as the white limers use, and so nail it on, the nails not above a span distant one from another. Some impute the killing of the worm to the tar, others to the hair that involves and chokes it. This is the best, and of least cost.

The worm begins with a hole no bigger than a needle's head, and by degrees becomes as great as a man's finger. The thicker the plank is the greater it grows : they are the most near fresh waters and rivers. Creatures bred and nourished in the sea, coming into fresh waters die ; and they die presently that are bred in fresh rivers and come into the salt.

The pitch of the Canaries melts not with the sun; therefore good for the upper works in ships. Near a town called Baku, in Persia, there issues out of the ground a great quantity of oil, which oil they fetch from the furthest part of all Persia; it serves them in their houses for lamps. Not far from that place tar issues out of the ground, which will serve for ships; proof whereof was made by the ship the Englishmen built in the Caspian sea.* At cape Tierra de Brea, in the isle of Trinidad,† in the West Indies, there is a pitch of the nature of that of the Canaries.‡

* See Thos. Randolph's embassy to Russia in 1568 (Hakluyt (ed. 1903), iii. 104).

† See Ralegh's *Discoverie of Guiana* (Hakluyt, x. 349, 350).

‡ The tar and hair system of sheathing is said to have been introduced by Sir John Hawkyns and remained long in use. Lead sheathing had been adopted by the Spaniards in 1514 and was tried here in 1553, but was soon abandoned. In 1670, Sir Philip Howard and others founded the Milled Lead Company for the application of an improved lead to industrial purposes and, through Charles II., succeeded in obtaining its trial in the Navy. Several ships were sheathed with it, but after an experience of five or six years its use was renounced as unsuccessful. It seems strange that the general adoption of copper for sheathing should have been deferred to such a late period (1760–80), seeing that in the first half of the seventeenth century East Indiamen were accustomed to 'sheathe their rudders with thin plates of copper to preserve the edges of them from being eaten flat by the worm.' In 1708 the Navy Board rejected a proposal to use copper generally on the ground that it was very expensive and would require a long time to put on and take off, but in 1717 the gates of a new basin at Portsmouth yard were ordered to be covered with copper. The waters of Portsmouth harbour had been a favourite haunt of the *Teredo Navalis* since Elizabeth's reign, and this was one of the reasons for the practical abandonment of the dockyard towards the end of the sixteenth century. Until the Alarm was coppered in 1758, inventors were continually submitting compositions, designed to protect the wood, to the Navy Board. They

The Purser.

In the nature of a cape merchant in a ship of merchandize, that keeps an account of all things brought into the ship; he ought to be an able clerk. He has the charge of the victuals sent aboard by the victualler for the company serving in the ship, for such time as by his warrant he is required, according to the proportion allowed by his Majesty, and to see the same delivered daily by the cook and steward to all men at their meals; and at the end of the voyage to deliver an account of his remains, in the presence of the Officers' clerks, unto the Victualler to whom also he must deliver back such cask and biscuit bags as are not spent in the voyage. He is likewise to enter the names of all the men in a sea-book, (as we term it) which he should originally receive from the clerk of the checque of the place where the ship was rigged and made ready, mentioning the places where they were prested * and the day of their entry, with such denominations of offices as properly belong to them. And likewise, if during the voyage any of the men happen to die, run away, or for good cause be discharged by the captain's order, to enter likewise the particular day of the month against each of their names in a margin of the books. He should also distinguish in the front of the book, at the beginning, when the ship entered into sea victuals; for that in all the King's ships the captain and officers do then commence into sea wages.

were all tried, patiently and hopelessly, by sending out to the West Indies a plank treated with the material and waiting for the report, which was always more or less unsatisfactory.

* *I.e.* given impress money.

He is, upon any lawful discharge, to make a pass to the party relating the time of his service, the place where he was pressed, his office, if he have any, and the place where he went from the ship, and to vouch the same under his own hand, whereunto he is to procure the captain's also, and to deliver it to the party to carry with him to the Treasurer of the Navy's office at Deptford, to receive his pay accordingly.

The Allowance of Victuals in the King's Ships at Sea.

Every man and boy is allowed a pound of bread a day.*

Every man and boy is allowed a gallon of beer a day, (that is to say) a quart in the morning, a quart at dinner, a quart in the afternoon, and a quart at supper.

Every man and boy is allowed a day, on flesh days, one pound of beef, or else one pound of pork with pease, that is, on Sunday, Monday, Tuesday, and Thursday.†

On fish days every mess, which is four men, are allowed a side of salt fish, either haberdine, ling, or cod,‡ seven ounces of butter, and fourteen ounces of cheese, Friday excepted, on which day they have no cheese at supper.

* I know of no authority for the bread; it is always biscuit in papers on the subject.

† Should be 1 lb. of beef a day for two days, and ½ lb. of pork a day for two days with one pint of pease.

‡ Each man's allowance was half a quarter of ling or one-eighth of a cod; with the fish was given 2 oz. of butter and ¼ lb. of cheese (*Add. MSS.* 9294, f. 686). This was the allowance in 1636; it sometimes varied in details with new victualling contracts. Haberdine is sun-dried cod.

The purser is allowed by every man sixpence a month to provide necessaries, as wooden dishes, cans, candles, lanthorns, and candlesticks, for the hold.

Trumpeter.

For the more reputation of this man's service in a ship of the King's, and under an Admiral, it is fit he should have a silver trumpet, and himself and his noise to have banners of silk of the Admiral's colours. His place is to keep the poop, to attend the General's going ashore and coming aboard, and all other strangers or boats, and to sound as an entertainment to them; as also when they hail a ship, or when they charge, board, or enter her. They set the watch at eight of the clock at night, and discharge it in the morning, and have a can of beer allowed for the same. This is not only incident to an Admiral, but to all captains that carry a noise of trumpets with them.

A Surgeon.

He has his mate: they are both exempted from all duty but to attend the sick and cure the wounded. There must be trial of his sufficience by certificate from able men of his profession: his chest must be well furnished both for physic and surgery, which should be viewed before his going to sea by men of skill. The surgeon is to be placed in the hold, where he should be in no danger of shot; for there cannot be a greater disheartening of the company than in his miscarrying, whereby they will be

deprived of all help for hurt and wounded men.*

The Corporal

Is to see the soldiers and sailors keep their arms neat, clean, and yare, and to teach and exercise them every calm day, sometimes with shot, and sometimes with false fires. In a fight he is to have an eye over the rest of the shot, that they do their parts and not to start from the place they are assigned.

So long as the fight shall last he is to put some budge barrels of powder in the galley,† or some close cabin, whither people may resort to have their bandoliers filled and their bullets and match supplied; with a special care, that no matches with fire come near the said galley or cabin.

* The history of the medical service of the Navy would require a chapter for its treatment, therefore it is better to say nothing about it here. Monson omits all reference to a ship's chaplain or 'preacher.' He was rated as a seaman and received the pay of one, together with fourpence a month deducted from each man's pay. The men complained that the fourpences were deducted in many ships which carried no preacher, and the preachers complained that when they served they did not obtain a tenth part of their fourpences; no doubt the higher Navy officials could have explained the reasons: 'that little which at length we receive comes with such trouble, such tedious attendance and long expectation, such charge and hindrance unto us, as that we are quite discouraged.' Under Charles II. the chaplains were approved by the Bishop of London and looked to him as their spiritual head.

† *Sic.* in MSS., but no doubt 'gallery.' In the MSS. galley is used for gallery (*ante*, p. 49), where the latter word is undoubtedly meant. Cook-room was the only name, in Monson's time, for the modern galley, of which the earliest instance given in the *New Eng. Dictionary* is 1750. Stern galleries were often enclosed and would then be as secure as a cabin from chance shot (cf. *post.* pp. 93, 103).

The Cockswain and his Mate.

The cockswain is, as it were, captain of the boat. He is to steer the skiff, and to be sent ashore on all occasions, or aboard all ships at sea he shall meet, and to be directed by the captain. He is to make choice of a gang, to be able and handsome men, well clothed, and all in one livery. It is necessary he be a perfect pilot for the harbours or shores he goes into, and to know the course of the tides. He ought to be a man of discretion and good shape, to countenance the employment he shall be sent on ; and if he hath languages it were much the better.*

The Quartermasters

Are four, and every one has his mate ; they have the charge of the hold for stowage, rummaging and trimming the ship in hold. They have their squadron in the watch, and see that every one do his office both by day and night : they have a care to look to the steerage and the traverse-board.†

The Cooper and his Mates

Are to look to the cask, hoops, and twigs ; to stave and repair the buckets, barrels, cans, steep tubs, rundlets, hogsheads, pipes, *&c.* for wine, beverage, cyder, water or other liquor. And as often as they shall fill fresh water the cooper is to give his attendance for the fitting the cask.

* See *ante*, p. 20. † See *ante*, p. 20.

The Swabber and Liar.

The swabber is to keep the cabins, and all the rooms of the ship, clean within board, and the liar to do the like without board. The liar holds his place but for a week; and he that is first taken with a lie upon a Monday morning is proclaimed at the main mast with a general cry, 'A liar, a liar, a liar'; and for that week he is under the swabber, and meddles not with making clean the ship within board, but without.*

The Steward and his Mate.

His office is to be the purser's deputy, chosen by him, and keeps always in the hold to deliver the victuals to the cook, who is trusted to retail the victuals in meet proportions, and is only accountable to the purser though he has some allowance from the Victualler for well husbanding and keeping the provisions from waste or putrefaction. He must not suffer banqueting or disorder in his room but keep it clean and sweet; and, as occasion shall serve, cause the quartermasters to rummage for the better coming to his victuals.†

The Cook

Is to dress and deliver out the victuals and is assisted by a mate or two; the meat being sodden,

* The Prince Royal of 1610 was the first vessel of the Royal Navy fitted with an enclosed sanitary convenience; otherwise the beak-head, forward of the beak-head bulkhead, was used, and to attend to its cleanliness was the especial province of the liar.

† The steward was supposed to stow the victuals and to act as a check upon the purser. Most often they were in collusion.

either of fish or flesh, he delivers it forth to them appointed to mess the company, and after to put out the fire and suffer none to be kindled, or people to resort into the cook-room but in case of necessity; as namely, when the cockswain's gang comes wet aboard, or sick men have occasion to use the fire for their comfort.*

All these officers aforesaid have many people under them in their rooms, not able upon any occasion to tackle the ship, or do any other work more than that they are bred to. Therefore, according to my directions in the First Book, it is fit and necessary that such people be put to the use and practice of the musket, or to the labour in hauling, and doing other helps to the gunner about his ordnance in the time of fight, otherwise the ship will be weakened, when there is use of men, by so many people who otherwise would do good service if they were taught what to do.

Having declared the use of every man's office and place in his Majesty's ships, and how conveniently all men are provided for that service in them, without confusion or trouble, one to another, a brave example and a thing desired that

* Boteler (*Dialogical Discourse*) warns the cook that he must be careful not to give a double allowance to the same mess 'which is a frequent cheat amongst seamen and pleaseth some of them almost as much as their very dinners besides.' The Admiral of the imaginary *Discourse* remarks, 'I doubt not but these cooks know well enough how to lick their own fingers, and I assure myself that their fat fees make them gainers whosoever loseth by the voyage.' But in the ordinary merchantman at sea the cook was, and is, no subject for jest but a very serious grievance; perhaps his nickname of the 'doctor' was due to his habit of administering nasty concoctions. From about Monson's period the custom began of providing maimed veterans, minus an arm or a leg, with cooks' places as a kind of charitable maintenance.

other nations shall not imitate, I will now shew how England exceeds Spain in this kind, and to that purpose will set down the managing and marshalling of the King of Spain's galleons, and shew the confusion and ill order aboard them in comparison of the King of England's.

The ill Management of the Spanish Ships.

THE Spaniards have more officers in their ships than we: they have a captain in their ship, a captain for their gunners, and as many captains as there are companies of soldiers; and, above all, they have a commander in the nature of a colonel above the rest. This breeds a great confusion, and is many times the cause of mutinies among them. They brawl and fight, commonly, aboard their ships as if they were ashore.

Notwithstanding the necessity they have of sailors there is no nation less respectful of them than the Spaniards, which is the principal cause of their want of them; and till Spain alters this course let them never think to be well served at sea. The meanest soldier will not stick to tyrannize over the poor sailors, like a master over his spaniel, and shall be countenanced in it by his land commander.

Their ships are kept foul and beastly, like hog-sties and sheep-cots in comparison of ours; and no marvel, for there is no course taken to correct that abuse by appointing men purposely for that office as we do in our ships.

Their allowance of diet is small, and yet not so small as ill-ordered. Every man has his proportion of victuals in the morning to serve him the whole day, and every man is his own cook; and he that is not able to dress his meat may fast. The soldiers will as ordinarily play away their allowance of victuals as money; and others, out

of covetousness, will sell their victuals for money to maintain play: this makes them grow weak and lean, like dogs, and unable to perform the service they are commanded upon.*

Our discipline is far different, and indeed quite contrary, as I have shewed before.

We have only one captain of the ship, sailors, soldiers, and gunners; and this captain had not so much as a lieutenant by the allowance of the Queen till of late; † so that matters of command, direction, and correction, depend upon his discretion. He sees that every officer humbles himself to his command, and that every ordinary man be as obedient to their inferior officers. He takes account of the expense of victuals, powder, and shot: he punishes every offence, and especially mutinies and quarrels, with great severity: he sees no injury shall be offered the sailors by the soldiers, but carries himself indifferently betwixt both. If he affect one more than the other it is the sailor, because of the necessity of them. He overlooks the ship once or twice a-day that she be kept sweet and clean, for avoiding sickness, which comes principally by slothfulness and disorders. He will not exceed the proportion of his men by allowance of his victuals, and will see every man be provided of his diet at a due and seasonable time; and for the better ordering of victuals there are divers officers appointed in sundry rooms, as stewards to give it out, meaner

* Gambling on board the Spanish ships was an old offence. In 1354 an ordinance of Don Pedro III. of Aragon directed that any soldier or sailor who played away his kit was to be whipped along the length of the central gangway of the galley to which he belonged. Whips were to be used instead of sticks so that there should be no risk of breaking his arms.

† 'Till of late' does not occur in the MSS.

persons to serve it, men to look to the shifting of it in water, and cooks to the dressing of it; so that no man but upon courtesy is admitted to have access into the cook's room, except the officers of the room. There are some appointed to make clean the ship within board, who are called swabbers, and without board by the name of liars, as I have shewed before. No man is suffered either to sell or play away his victuals, but to take it orderly and in due season, which keeps them in health and heart.

The greatest inconvenience in his Majesty's ships is the placing the cook-room in the midships, and so low in hold that many discommodities and dangers arise by it; if it take fire it is not so easily quenched as if it were aloft and in the forecastle. Secondly, it will make the ship camber keeled. Thirdly, the continual fire that is kept in that part of the ship casts such a heat amongst men and victuals that it begets sickness, and disperses such an offensive smoke in the ship that it putrefies victuals and makes it both unwholesome and untoothsome to be eaten.

The Difference between the King of Spain's Ships in former Times and these Days, and the true definition of the Strength of Ships.

I HAVE heard divers sufficient men, as merchants and others that lived in Spain before the wars with Queen Elizabeth, greatly cry down the King of Spain's ships in respect of ours; as in particular, that they were huge and mighty in burthen, weak and evil-fashioned in building, lame and slow in sailing, fitter for merchandize than war; and I remember that old seamen, as Sir John Hawkyns, and others, have maintained that one of her Majesty's ships was able to beat four of them. I confess we may the rather believe it because the event has shewed it; for, if we examine the particular loss on both sides, her Majesty's ships have devoured divers of the King of Spain's; whereas there was but only one of hers taken, and that merely by the indiscretion of the captain Sir Richard Greynvile.* For which one there have been burnt, sunk, and taken, twice as many as the Queen has in number; insomuch that if the Queen's loss had equalled the King of Spain's, she could hardly have maintained the Navy in that flourishing state it is in.

But if we should attribute these fortunes to ships, which are made all of wood and iron, and

* The Jesus of Lubeck, a man-of-war, was also taken by the Spaniards in 1568 at San Juan de Ulua.

after one order of building, it were great folly; but give Cæsar his due, and allow the ships their due. For a ship is but an engine of force, used for offence or defence; and when you speak of the strength of ships you must speak of the sufficience of the men within her. And therefore in comparing the Spanish ships with ours I enter into the comparison of men, for, if it were in my choice, I rather desire a reasonable ship of the King of Spain's manned with Englishmen than a very good ship of her Majesty's manned with Spaniards; so much account I make betwixt the one and the other.

But if you will agree of the true strength of ships, and the difference betwixt the Queen's and the King of Spain's, as heretofore I have said, the King's are huger in burthen and bigness, which is a great advantage in boarding; spacious within board, and will contain more men than ours; have more decks, and therefore carry more ordnance.

But, you will say, all this is nothing without swift sailing, which advantage we have of them. It is true it is the only advantage on our side; which advantage may be compared betwixt a greyhound and a bear, betwixt a galley and a good ship in a calm, or betwixt a swallow and an eagle; that though they be of little force to hurt bear, ship, or eagle, yet are they of agility and nimbleness to run and fly from them.

But if we will enter into the true strength of shipping, without advantage of men or sailing, but that you must fight according to the old saying—*Fight Dog, Fight Bear*—that is, till one be overcome, which cannot be better decided than at anchor in harbour, I say, no man can deny but that the King of Spain's ships are stronger

than ours, by the reasons before alleged—that they are bigger, and contain more men and ordnance, the number more, of greater burthen and therefore of greater strength; as I have already shewed in the voyage to Cadiz, in 1625. But, according to my first argument, considering the irresolution and insufficience of the men, I would rather choose to be one of the ten of the Queen's to encounter with twenty of them, than one of the twenty to encounter with ten of her Majesty's.

Notwithstanding these reasons, I do not disallow the opinion of such men as defend the difference betwixt the English and Spanish ships. For, to speak the truth, till the King of Spain had war with us he never knew what war by sea meant, unless it were in galleys against the Turks in the Straits or in the islands of Terceira against the French; which fleet belonged to him by his new-gotten kingdom of Portugal.

The chief ships he had of his own in his expedition of 1588 belonged to Portugal; most of the rest consisted of several nations, as Levantines, Biscainers, Flemings, and merchants of his own country. Whosoever since have seen the difference of their building would scarcely know the others to be ships, in respect of these that are now. The first time the King shewed himself strong at sea was in the year 1591, when the Revenge was taken; since which time I will approve there have been built at the King's charge sixty nine ships, as shall appear in the ensuing list I have written, and most of them of a thousand tons in burthen, and upwards; as to instance in the two galleons we brought from Cadiz, which may sufficiently satisfy us.

God has endued England with a singular

blessing above the southern countries, both with shipping and mariners. And, to speak the truth, England lies more convenient for the breeding of seamen than Spain; for what makes skilful and expert mariners but dangerous and painful navigations, where the weather and seas are boisterous and rough, the coasts perilous, and the tide forceable, all which our country is subject to. Then, on the contrary, what makes idle, loitering, and unskilful seamen but such navigations where the seas are calm and the weather fair, the coasts not perilous, nor the tides strong; all which commodity Spain has. For betwixt them and their Indies, Guinea, and Brazil, to which places their chiefest trade is, the seas are calm, and the winds certain, outward and homeward, seldom foul weather, or not long, the coast less dangerous than any other, and a small or no tide at all to annoy them.

When there is so great an ease in navigation it breeds idle and unable mariners. What makes so great a difference betwixt the Biscainer and natural Spaniard for sea, but the difference of the voyage? The one I have shewed is easy and full of pleasure, the other painful and troublesome. The Biscainers' greatest trade is in fishing on the coast of America, where, with great labour and pains, they kill the whale and take their fish: this breeds perfect and skilful mariners, and makes them not only exceed all other Spaniards but get a reputation and employment in the King's ships. There is no officer, from the degree of a captain to the meanest officer, but commonly is a Biscainer; and the Biscainers have divers privileges, not granted to any other subject of Spain, to encourage them to persevere in their sea courses. And to give them their due no nation is able to

compare with those few mariners and seamen they have (for many there are not) in knowledge, hardiness, and valour; and were it not for the Biscay sailors, I know not how the great Armadas of Spain would be maintained.

The Allowance of Diet in the King of Spain's Ships and Galleys.

EVERY soldier in a ship or galley has a pound and half of bread allowed him every day.

Of fresh beef three quarters of a pound, of salt beef half a pound and an ounce.

A wine quart of wine a day, and a pottle of water.*

The slaves every day half an ounce of oil, two ounces of rice, beans, or garbanzos ; † one of these three.

They have six meals of flesh in a year, two at Christmas, two at Shrovetide, and two at Easter.

The master, boatswain, corporal, gaoler, purser, oar-maker, and caulker, have double the soldier's allowance a day.

The barber,‡ two gunners, and boatswain's mates, have but one allowance and a half a day. Those that have two allowances a day have twenty shillings a month. Those that have but one and half, have fifteen shillings a month. A single allowance but ten shillings a month. A pilot has four allowances, and fifty shillings a

* So Monson, but he uses the Spanish 'quartillo,' as equivalent to the English quart. See *ante*, ii. 328 ; the victualling allowance seems to have varied somewhat according to the character of the service. Sundays and Thursdays were meat days ; the fish ration was sardines or dried cod.

† Beans of a particular kind, largely used in Spain to this day.

‡ *I.e.* surgeon.

month. A captain is allowed five pounds a month and two allowances. A General twenty-five pounds a month, and but one allowance.

There are allowed in every galley two slaves to row in the boat to shore, who have one allowance a day betwixt them both.

The King of Spain pays yearly six thousand ducats for the maintaining of a galley, and before one be launched she stands him in seven thousand ducats; I mean only her bare hull. All his galleys are built in Barcelona of pine apple wood. There is in a main sail of a galley fifteen hundred yards of cotton; in a fore sail three or four hundred yards.

I endeavoured in the time of the Wars with Spain to understand the Condition and Force of that King by Sea, and how from time to time he increased in Shipping, as also the Decay of them; which following shall give you light of the number of his Ships, their Names and Burthen, that was built from the year 1590 to 1600, and how many of them were Lost and Where.

In the year 1591:—the Twelve Apostles, six built in Bilbao; their names as follows; their burthens betwixt thirteen and fourteen hundred tons:—*

St. Philip, burnt by us at Cadiz in 1596.

St. John, burnt, breaming her, at Havana; this was she that fought so bravely with Sir Thomas Baskervile in the Indies, her captain, Garibay, who was afterwards Admiral of the Indies fleet, Sir William Monson met and fought withal at the Terceiras.

St. Thaddeus, lost in 1599, when the Adelantado pursued the Hollanders.

St. Barnaby, lost going into Lisbon.

St. Matthew, taken by us at Cadiz in 1596.

St. Bartholomew, lost in Biscay, in 1597, when the Adelantado returned from Falmouth.

* These were commenced in November 1588; they were probably launched before 1591 (*Disquisiciones Nauticas*, iv. 369).

The other six at Santander:—

St. Paul, always Admiral, broke up at the Horcados.*

St. Peter, Vice-Admiral, the like in Lisbon.

St. Simon, made a carrack, and since broke up.

St. James the Elder, lost coming to Coruña with the Adelantado in 1597.

St. Andrew, taken by us at Cadiz in 1596.

St. Thomas, burnt by us at Cadiz in 1596.

In the same year two small ships of two hundred tons:—

Santa Ursula.

La Castidád.

The same year two ships built in Portugal, of eight hundred tons, by command of Don Alonso de Bazan.

One of them lost upon cape Finisterre, when the Adelantado went to Coruña in 1597.

In the year 1592 seven ships, of five hundred tons, built in the Renteria:† these ships use to fetch the King's treasure from the Indies. I met with them at the Terceiras in the Islands voyage in 1597:—

Nuestra Señora de Aranza.

Nuestra Señora de Monserrate, lost on the coast of Spain.

Nuestra Señora de Guadalupe, lost in the Indies.

Nuestra Señora de Valverde.

Nuestra Señora de Aliste.

Nuestra Señora del Rosário, lost on the cape St. Mary's laden with plate; Zubiaur, Vice-Admiral at Dover, was captain of her,‡ and with her the

* Inside the bar of San Lucar.

† Near Los Pasages.

‡ *Ante*, iii. pp. 17, 35.

Nuestra Señora de la Mercéd; (plate most of it saved).

Built in the Canary Islands, the same year, four frigates of four hundred tons each :—

Santa Barbara, burnt by us at Cadiz in 1596.
Santa Mary Magdalen, burnt herself at Puerto Rico when Sir Francis Drake was there.
Santa Helena, was burnt by us at Cadiz in 1596.
Santa Clara.

In the year 1595, built in the Renteria, seven ships of thirteen hundred tons each :—

St. John Evangelist.
St. Matthias, broke up at Lisbon.
St. Mark.
St Lucas, lost coming out of Ferrol, when the Adelantado came for England in 1597.
St. Augustine.
St. Gregory.
Flor de la Már.

The same year, and in the same place, three small ships of sixty tons :—

La Justícia, lost at sea.
La Esperánza, taken on our coast by an English man of war.
La Verdád.

The same year built in Lisbon three ships, by Lambert, an Englishman,* of four hundred tons :—

El Espíritu Santo, lost in 1597 on the islands of Bayona coming to Coruña with the Adelantado.
La Fé.
La Caridád.

In the year 1596, built at Fuenterrabia, two

* See *ante*, ii. 319, note 18.

ships of three hundred tons, which were sent into the South Sea :—

Nuestra Señora de Loreto.
Nuestra Señora de la Peña.

In the year 1597, built in the port of Portugal,* two ships of fifteen hundred tons, that were made carracks :—

St. Antonio.
St. Vincent.

In the same year, 1597, six ships in the Renteria, of eight hundred tons each ship :—

St. Gerónimo, lost in 1599 pursuing the Hollanders with the Adelantado.
St. Domingo, lost the same time.
St. Francisco.
St. Ambrosio.
St. Christopher.
St. Joseph.†

The same year, and in the same town, two ships built of two hundred tons :—

Santa Margarita.
Santa Martha.

In the same year, 1597, built at Leça,‡ two galleyzabras of three hundred tons :—

Santa Margarita, sold to merchants.
Santa Juána.

In Santander, the same year, built two ships of three hundred tons :—

* Oporto.

† These six probably belong to another set of 12 Apostles built in 1597 (*Cecil MSS.* vii. 137). Another dozen, similarly named, were said to have been hired at Genoa in 1595 (*Sidney Papers*, i. 384). It is of course no discredit to Monson that his list is not complete ; it must have been compiled from fragmentary information and with great difficulty. See also *ante*, i. p. 244 ; the 12 Ragusans referred to there may be the Genoese of 1595.

‡ Near Oporto.

La Paciéncia.
La Templánza.

In the year 1599, built thirteen ships of thirteen hundred tons, of which seven at Los Pasages :—

St. Andrew.
St. Philip.
St. John, cast away at San Lucar.
St. Thomas.
St. Barnaby.
St. Salvadór.
St. Nicholas, cast away at San Lucar.

Six ships built in Bilbao :—

St. Matthew.
St. Simon.
St. James the Greater.
St. James the Less.
St. Bartholomew.
St. Lucas.
St. Diego de Guadalupe, of a thousand tons, built by a merchant in Biscay but bought by the King.

The number of them all is sixty nine, whereof burnt, taken, and lost, sixteen ; but besides these sixteen the King has lost divers more, some of his own, some hired, and others pressed to serve. It is thought the dominions of Spain lost in time of war six hundred vessels, one with another.*

Now I am upon the Spanish acts and accidents at sea, I will add such instructions as Generals of fleets use to deliver to the captains under them.

* Instead of this paragraph A has, 'Besides those ships you have heard that hath been lost, there hath been many others, as Levantiscos, some taken perforce to serve, and some of the King's own built before 1590, that it is thought Spain, and the dominions thereof, hath lost in the eighteen years of war 3000 vessels great and small.'

And how their captains of land soldiers, and captains of ships are to carry themselves one to another, that every man's command may be known and distinguished, and particularly in their expedition for England in 1597, where the Adelantado was General, intending to have landed at Falmouth.

Don Martin de Padilla, Adelantado Mayor of Castile, Count of St. Gadea, Captain-General of the Galleys of Spain, and of the Navy Royal of the Ocean Sea, and of the Catholic King's Army, Anno Domini, 1597.*

Imprimis, all servitors, as well by sea as land, of what state or condition soever, shall be always ready to keep and observe these orders that are delivered them to live a Christian and virtuous life, under the penalties contained in these articles.

2. You shall be ready, as well land as sea captains, with your officers and companies, to ship yourselves without any delay when you shall hear the Admiral fire to call your companies aboard. You shall muster your people and make ready your ships to set sail, and so to follow the Admiral; as well sea captains as land captains that shall be in any such ship and shall fail to do the same shall be punished with all rigour. And all mariners, officers, or soldiers that shall tarry behind the fleets I from this time condemn to lose all such

* Don Martin de Padilla y Manrique has been frequently mentioned in Vol. II. He began his career as a soldier in Flanders in 1558 and never freed himself from the parade associations of his early training. In 1568 he was put in command of four galleys in the Mediterranean and was at Lepanto in 1571; in 1585 he became Captain-General of the galleys of Spain, in 1587 Count of St. Gadea, and in 1596 Captain-General of the Ocean Sea, the highest naval rank under the Spanish Crown. He died in 1602.

wages as shall be due to them, and to serve the King at an oar in the galleys four years, and the officers to be broke and deprived of office for ever.

3. As soon as ever you are out of harbour, as well sea as land captains of every ship, shall muster their sea and land men and shall make a list as well of their men as their arms. And they shall give order that they who have no arms may be provided; the harquebusiers, and musketeers that have no shot you shall cause them to cast it presently; you shall provide them match ready; you shall carefully see your soldiers' powder dry in the flasks, and those ready, as it were, to present fight. This readiness must you be in at all hours. Their touch-powder also, their muskets, and harquebuses must be very clean; and that they neither want vice-pins nor scourers; that they keep their cocks and pans very clean and in good order. And if in the muster you make you want any of those soldiers you had ashore, then let me have notice thereof that they be sought out and punished.

4. The captains of land men shall exercise their musketeers and harquebusiers by their companies, at first with powder in their pans, and afterwards to shoot at a mark set up against the fore mast with a white in it, and shoot at it by level. Your serjeants and corporals must be very careful to see them exercise and to keep their weapons very clean.

5. Every land captain shall be very careful and make his soldiers know how to serve in shipping, and so to quarter them where to go or come from, if need be, that they may perfectly know their places where they are to stand to fight; so that at the time of need they may not go thwarting one another in the ship, nor trouble

one another. The captain of the sea shall likewise make his great ordnance ready, and the ammunition must be in lockers fast by the pieces. There must be always in readiness spikes, lanthorns, cartridges, armours, corslets, to have them clean and every man his own.

6. The gunners shall divide themselves into companies, and every man shall know his charge, what ordnance he is to look to, and to acquaint the captain withal, and he to appoint such help as shall be necessary. The captain shall be very careful to visit his ordnance that if there be any fault he may see it remedied; and the gunner that hath not his piece in readiness to be punished, giving me the General notice thereof.

7. Every pilot and captain of a ship shall have a special care to speak every day with their Admiral, and to take the word, and so coming in good order, one ship to give another room without molesting one another. And if they cannot take the word for some extraordinary occasion, then follow this order:

The word of the	Sunday	*St. Mary.*
	Monday	*St. James.*
	Tuesday	*St. Barbara.*
	Wednesday	*St. Eugenius.*
	Thursday	*St. Raphael.*
	Friday	*St. Benedict.*
	Saturday,	*St. Martin.*

8. No ship, by day or night, shall go ahead the Admiral without he have express order to do it.

9. No ship shall go to windward, nor stop in the wind, without he be forced to it or have order so to do.

10. If any ship fall foul of another, whereby any of them be damnified, there shall be enquiry

made which of the pilots was in fault, and he shall pay any hurt so done; besides that, he shall be put in prison for his fault during my pleasure.

11. If we chance to sail with a scant wind, and by night, and the Admiral designs to tack about, she shall shoot off a piece and shew her lanthorn upon her poop, that thereby you may know it; and then shall every ship put out a light that the Admiral may perceive you know his meaning.

12. If the Admiral, by force of wind and weather, or else to repair or amend something amiss, shall be driven to lie a-hull, then she shall shoot off a piece and set a fire upon her beak-head. As soon as ever you shall see this sign every man shall lie a-hull, and put out his light, that the Admiral may tell them, and so be satisfied that they know his meaning and that they are a-hull as well as she. And when this is done let the pilot take heed that they give the ship scope enough, and keep good watch that you do not fall aboard one another and so spoil yourselves.

13. When the Admiral sets sail by night she will shoot off a piece and set a light on the middle of her main shrouds, and so every man shall set sail and follow.

14. If the Admiral come to anchor in any bay, or upon any coast, she shall set a light upon the head of her foremast. And when the rest of the ships see this sign they must come and let fall their anchor as near the Admiral as they may see that they be not foul of her ground tackle.

15. All captains and officers shall diligently search what wants they have in their ships, and then to be suitors that they may be provided in time, that when need is they be not at a loss. It is no reason that he who is provident beforehand,

and does not only provide for his wants but preserve what he has by his industry and diligence, should have any thing taken from him and given to slothful captains who do not perform their duties as they are bound.

16. All shipping that shall shoot off any ordnance shall, within two days, come to me, the said General, with a note under the captain of the soldiers' hand, drawn by the purser and also the captain of the ship, for what cause it was shot off, and what piece it was, that if it be found that the cause be just he may have allowance. If it exceed the time of two days his note shall not be received, except it be known he was not able to come to the Admiral.

17. If any ship break a mast or a yard by night she shall shoot off a piece, and put a light on the beak-head and another upon the poop, that I, and the rest of the ships, may know that she is in distress ; and all ships shall make haste to succour her.

18. When the Admiral comes to anchor in a harbour or bay let the pilots take good heed to give a good scope, that one may not hurt another. And he that comes latest to an anchor not to come foul of any ship anchored ; for if he do, the pilot is to pay the loss and hurt that is done.

19. All the ships shall be careful to keep a man in the head of the topmast ; and he that spies a sail shall shoot off a piece that way the sail bears and strike his topsail ; and so many sails as he spies, so many times to strike his topsail ; and other ships to bend themselves towards him.

20. If you discover any vessel in the night, and are not able to come to the Admiral, then to shew so many lights as you spy sails, and to place them fore and aft that they may be discerned.

And he that doth espy the first ship of the enemy shall have a jewel given him by me for his pains.

21. When the Admiral putteth her ancient in the main-top, then all the fleet is to come to speak with him; but if she shoot off a piece withal, then the captains and pilots are to come on board.

22. In bearing in with the shore the ship that first doth espy the land shall shoot off a piece and put an ancient in the head of her topmast; and, if it be in the night, to shoot off a piece and to come to speak with the Admiral.

23. If in the night there happen a storm the Admiral will put out two lights besides his ordinary lights; and every ship is to shew one light upon the poop, to avoid any hurt.

24. If ships be divided in foul weather from the Armada, and have none of the three flags to follow, they shall obey the biggest of their company till they meet with the Admiral, Vice-Admiral, or Rear-Admiral.

25. Before you go from Coruña you shall have by itself the order of the cross which you shall keep whilst you are at sea.*

26. When the Admiral shall vail his main-topsail, and pike his topsail yard a little, then shall every ship set itself in a warlike posture and put himself into order of battle.

27. When the Admiral and his fleet arrive in harbour, or upon a coast, no man or boat must go ashore without my leave.

28. If any captain of a ship be out of his ship, though it be with licence, yet he shall appoint no lieutenant without my order.

29. If we meet the enemy you are to make

* The text follows the only MS. (B) available but is manifestly corrupt. It should probably run 'by myself the order of the course.'

yourselves ready to fight, and to place the soldiers in their places; if in the night, to keep their matches close that they may not be discovered by the enemy.

30. If we meet with the enemy, and the Admiral and his squadron resolve to board, other ships must do the like; but if the pilot be of another opinion yet, notwithstanding, they are to do it, and another sufficient man to be put in the place of the pilot. And if there be a fault in doing thus it shall lie upon the captains of soldiers, of the sea, and the pilot.

31. If you chance to give chase to any of our enemy's ships and any one of our ships do overtake them you shall cause them to yield; and in that case let all the company do that they are bound to do, obeying their superiors under pain of receiving great punishment with much rigour. And if any ship cometh with them whilst he is aboard fighting with the enemy then shall that ship board the enemy on the other side, and, the ship being taken, they shall pillage her alike. All jewels, and money, not exceeding a hundred ducats, the arms of them taken, and apparel to be theirs, so it be not stuff uncut. And whosoever shall light upon jewels and stuff, to make it known in three days; if not, to lose his pay and be punished; and what he has taken to be divided, according to the King's instructions.

32. A ship that takes a prize, no other ship shall have to do with her, but follow the rest, if there be more. But if he chance to go on board her, and take any thing out of her, he shall pay the captain four times the value of it.

33. If any such ship yield, not to board her but to send on board to fetch away the prisoners; and such pillage as is in her to be divided according

to the last article. And he that puts himself aboard without leave shall lose his pay and be punished; and if he will do it perforce it shall be lawful for the company to kill him; and in like case, if a man shall go into a boat without leave, to be killed.

34. The first, second, or third man that enters a ship, shall have a jewel given him, according to the discretion of the General.

35. Whosoever enters an enemy's ship without arms, fighting, shall lose all that he gets in her and his own clothes beside.

36. If an Admiral give chase, and suddenly tack about, or lie by the lee, it is a sign he sees many ships, and every ship must then draw near his Admiral in order of fight.

37. The captains of soldiers and ships must command store of water to stand upon the deck, and blankets and coverlets in them, to be ready to quench any fire that shall happen.

38. Before you come to battle to have your yards slung.

39. If you lose company in foul weather, and descry one another, the greater number to go to the less; if by night, the greater number to shew two lights abaft, the other shall answer with one light putting it in and out, as when they come to anchor in the night.

40. You must have a care of your powder and cartridges to be kept below in ballast, and a careful man to have charge of them and to have numbers set down upon every cartridge according to the piece.

41. That every carpenter and caulker be ready with his lead, leather, nails, and other things for stopping of leaks.

42. That you make no fire till the sun rise,

and then to dress the meat for the company. The soldiers to watch in the day time in their quarters till an hour before sunset, and then to put out the fire and light it no more till the next day.

43. The soldier that has the watching of the fire shall not suffer any to be carried out of the hearth either to the captains of the ship, soldiers or any other; and he that does it to be severely punished.

44. To keep an ordinary light in the bittacle for the compass, and a lanthorn under the spar deck for the soldiers to watch; and he that takes away either to be condemned to the galleys for two years, to serve for a soldier without pay.

45. The captain of the soldiers is to lodge with the captain of the ship in the best cabin; the pilot, master, ensign, and serjeant together, in the second cabin; and the rest of the officers accordingly; and to have an eye over the soldiers for brawling.

46. Likewise I command that no soldier, mariner, nor officer, dare to be so bold as to pass from one company to another, or from one ship to another, without my order and express licence. And that no captain of any company or ship shall give leave to any soldier or sailor or any other man whatsoever.

47. If we discover any vessels, and the Admiral make a signal of giving battle, then the captain of the soldiers shall set his men in order and see what provision they have so that they may be sufficiently provided of powder, shot, and match. And the master of the ship, or the steward, that shall have the charge of delivering at this time, shall have for their warrant the captain of the soldiers' commandment, and the like for powder,

shot, and cartridges and all other necessaries for great ordnance.

48. And for that we have in our company many hulks and the people of them are deceitful, I ordain that if by night you do perceive that the said suspected persons are willing either to rise against you or to set any other course, you shall fire three flashes of powder that I may understand thereby that you have need of succour. And if any ship see the like sign they are to repair to you with all speed to give you succour.

49. And though in my Instructions I have given you sufficient order for your navigation, which must not be violated, yet the thing of greatest importance is that the captains by sea and land be prudent, vigilant, and careful, as I understand all are in this service.

50. I have ordered that all the ships of every squadron shall carry their flags only of one colour, that they may be known, and gotten together the sooner for the executing of any service. And because sometimes order cannot be given by word upon any sudden occasion that shall happen, you are to fix your eyes upon your Admiral, and when he sets upon his poop the colours of any of his squadrons, the Admiral of that squadron is to behold which way the sign is made by the same colours that so he may follow any fleet so discovered.

51. If any of the strangers' ships shall have a leak, let it be searched by the two captains by sea and land ; and if they find it to be done on purpose let him be hanged and his ship forfeited.

52. That no captain or pilot do set any other course than the Admiral directs ; and if they do no excuse shall serve their turn.

53. That no captain of sea or land, or other

soldier, ship any woman, except she be married, and proof thereof brought from the General's priest, upon forfeiture of his office and serving the King two years without pay.

54. If any servitor stand in need let him go to his captain; and if he cannot help him, then to the Admiral, where he shall have help.

55. If any ship be in distress, then to shoot off a piece, and those next to her to hasten to her; and if they fail to be severely punished.

56. If we meet with an enemy, great or small, let none of the fleet follow him, but follow the Admiral of his squadron, and do as he does, or shall direct, without seeking advantage or tarrying behind, except pinnaces and small ships, which shall be at the disposal of the Admiral.

N.B. *Some of these Instructions are frivolous, some of them needless, but most of them tedious, and may be comprehended in fewer words and to greater purpose. But, for my part, I will rather desire to know what they do than seek to follow and imitate their directions in sea affairs.*

How to fight at Sea one Ship with another; or in Fleets; or Ships against Galleys; or Galleys against Ships: and the Manner how every Country preserves Men from Danger in a Fight.

BEFORE ships and fleets encounter, or enter into fight, these things following are necessary to be done:—to divide the company into three parts; the one appointed to tack the ship, the second to ply the small-shot, and the third to attend the ordnance; but not so precisely but that one may be assisting to the other in the three several places. The ship is to be brought into its short or fighting sails, *viz.* her foresail, her main and fore-topsails. For the other sails are troublesome to handle, and make the ship heel so that her lee ordnance cannot be used; besides the danger of firing her sails with arrows and other wildfire from the enemy.

The master is to appoint a valiant and sufficient man at helm and to receive his directions from his captain how to order the fight and where to board. Which must be done with most advantage, and according to the placing the enemy's ordnance; and therefore it is requisite to have a captain of experience.

Every officer is to do his part; the boatswain to sling the yards, to put forth the flag, ancient, and streamers, to arm the tops and waist-cloths; to spread the netting, to provide tubs, and to

command the company to make urine in them for the gunners to use in their sponges to cool their ordnance in the fight, and all other things that belongs to his charge. The gunner is to appoint his officers to their quarters, to have care to the fire, budge barrels, and cartridges, to have his shot in a locker near every piece ; and the yeoman of the powder to keep his room, and to be watchful of it, and to have his eye upon any leak that shall happen in hold. The carpenters are to be vigilant, and to have their oakum, lead, nails, and what else belongs to the stopping of leaks in readiness. He must have a man always ready to sling overboard if there chance a leak. Or if there be cause to take in the lower tier of ordnance, by the sudden growing and working of the sea, he must have all things ready to caulk the ports.*

The Build of Ships.

There are two manner of built ships : the one with a flush deck, fore and aft, snug and low by water ; the other lofty and high charged, with a half deck, forecastle, and cobridge heads. The ship with a flush deck I hold good to fight in, if she be a fast ship by the wind and keep her self from boarding. She is roomsome for her men, and yare to run to and again in her ; but she is not a ship to board, unless it be a merchant,

* The station list of the Bonaventure, in the Cadiz voyage of 1625, was :—33 men to handle the sails, 41 small-arms men, 2 helmsmen, 7 carpenters and their mates to remain in the 'tween decks and hold, 2 men in the powder room, 3 surgeons to be in the hold, and 59 men at the heavy guns. Of the latter, 8 men were allotted to 4 demi-culverins, 5 to two whole culverins, and 1 man to a saker or fowler. But all the ships of that fleet were insufficiently, as well as inefficiently, manned.

or another ship that is inferior to her in strength and number of people. For if it happen that she be boarded, and put to her defence, she lieth open to her enemy; for gaining her upper deck you win her, having neither forecastle nor other close-fight to retire unto; and in that case half the defensive part of the ship is the strength of the forecastle. When her deck shall be gained, and her people beaten down into the second deck, the only help is to use stratagems by fire in making trains of divers fashions to blow up the upper deck and men upon it; and this did the Biscainer I have formerly spoken of in my First Book, in the voyage I first went to sea and the first fight I did ever see, in 1585. This ship had a flush deck fore and aft, which in boarding we won upon her, and her men being beaten into her other deck spent the most part of their powder in making trains to blow us up; which, by fortune, we prevented, and with our firepikes fired them before they could be brought to perfection. And thus after twelve hours' fight in the night, we being upon a flush deck, and commanding their scuttles aloft that they could not come up to us, and they commanding the scuttles below that we could not go to them, what with wearisomeness, want of powder, and the death of their people they yielded as I have before described.

As I have said, such a ship that has neither forecastle, cobridge head, nor any other manner of defence but with her men only; that hath no fowlers, which are pieces of greatest importance after a ship is boarded and entered, or lieth board and board; for the ordnance stands her in little stead, and are as apt to endanger themselves as their enemy, for in giving fire it may take hold of pitch, tar, oakum or powder, and burn them

both for company : but a murderer or fowler being shot out of their own ship, laden with dice shot, will scour the deck of the enemy and not suffer the head of a man to appear. The advantage of a ship with a flush deck, that boards another to windward, is this :—she may with her lee ordnance shoot the other under water, and herself in no hazard ; the ship that is boarded to leeward of her is at the other's mercy and becomes weak in comparison of the other to windward. Whoever enters and takes possession of the upper deck of such a ship, that is plain fore and aft, shall be able to cut down her masts, shrouds, and all things over head ; that though he take her not, yet she shall be left a wreck in the sea, and perish.

* I will make a comparison of the James Regis of his Majesty's, of which I will say that, for her mould and condition, she is a paragon of ships and not to be equalled. But in her, built with a flush deck, and her close-gallery abaft, she is to be excepted against in a defensive part. But how it may be amended and she be made serviceable, as well for defence as offence, I will refer to my own direction, with his Majesty's approbation ; though something I will say of her close-gallery, that is made only for a shew and to

* The paragraph about the James does not occur in the MSS. used for collation. She was built in 1633. Her dimensions were :—Length of keel 110 feet, outside beam 37 ft. 6 in., beam inside the plank 36 ft. 10 in., depth from the upper edge of the keel to the greatest breadth 16 ft. 2½ in., depth of keel 1 ft. 9 in., depth from upper side of deck to upper edge of keel 22 ft. 2 in., midship draught of water 17 ft. 2 in., height of ports above water at that draught 5 ft. The ports were 9 ft. apart and 2 ft. 2 in. square. She was surveyed by members of the Trinity House and of the Shipwrights' Company, who reported that she could not be better (*S. P. Dom. Chas. I.* ccxliv. 23).

accommodate captains, when I shall have occasion to treat of galleries. The only strength of the James at this present is in her broadside, where she hath two brave platforms of ordnance to overdare any ship to board her; nor no enemy in discretion will do it if he can find a weaker part in the ship to attempt. But suppose she be boarded in her prow, or abaft at the poop, and be entered by more men than the hands of her company can resist; she, neither having forecastle ahead nor close-fight abaft, all must rest upon the strength and valour of a few men; which, if they be overcome, both ship and they must fall into the hands of an enemy in the manner I have shewed.

The best manner of a fight in a ship of a flush deck, or any other indeed, being to windward of his enemy, is to bring himself within pistol shot of her, and to ply her and her ports with small-shot at that distance; to lade his ordnance, some with musket bullets, others with cross-bar, and langrel shot, or billets, to be the destruction of men but to avoid boarding, or being boarded. This I hold the best manner of fight betwixt ship and ship; it will make short work and the quarrel will be soon decided. Fighting further off is like a Smithfield fray in times past with sword and buckler, which is nothing but the wasting and consuming of powder to little purpose.

A high built ship is the better for these reasons —majesty and terror to the enemy, more commodious for the harbouring of men. She will be able to carry more artillery, of greater strength, within board and make the better defence. She will overtop a lower and snug ship; her men cannot be so well discerned, for that the waist-cloths will take away the view and sight of them.

And lastly, to speak of a ship with three decks,

thus it is:—she is very inconvenient, dangerous, and unserviceable; the number and weight of the ordnance wrings her sides and weakens her. It is seldom seen that you have a calm so many hours together as to keep out her lower tier, and when they are out, and forced to haul them in again, it is with great labour, travail and trouble to the gunners when they should be fighting. She casts so great a smoke within board that people must use their arms like blind men, not knowing how to go about their work nor have a sight of the ship with whom they encounter.

How to preserve Men in Fight.

Several nations have several ways to preserve their men in fight at sea. The French use to stow half their soldiers in hold, and to draw them out, causing the others to retire as there shall be occasion or necessity. This I hold dangerous, troublesome, and inconvenient, when all men are otherwise busy in their several places, to pass to and again with their matches lighted which may unhappily fall on something to take fire.

The Spaniards imitate the form of their discipline by land; as namely, a head-front or vanguard, a rearguard, and a main battle. The forecastle they count their head-front for vanguard, that abaft the mast the rearguard, and the waist their main battle wherein they place their principal force. This in my opinion will breed great disorders, especially if the ship should fight with all her sails standing; for the labour of the mariners in tacking and handing their sails will confound them, that they know not what to do. But if they strip themselves into their fighting sails that a few men may handle it would be less inconvenient,

but howsoever here is no provision for safeguard of men who lie open to their enemy.

The Dunkirkers use in fight to place their small-shot flat on their bellies upon their decks, that the shot, great or small, coming from an enemy, shall have only their head for their aim. This is to be allowed of in small ships that carry not many men nor ordnance, but inconvenient in greater vessels where men are ever in action running and stirring up and down in the ship.

There is a device made with a plank of elm, because it does not shiver like oak; this plank is musket proof, and removed with trucks * from one part of the ship to the other, which is a good safeguard for small-shot. But in my opinion I prefer the coiling of cables on the deck, and keeping part of the men within them, (as the French do theirs in hold) before all other devices. For the soldiers are in and out speedily, upon all sudden occasions, to succour any part of the ship or to enter an enemy, without trouble to the sailors in handing their sails or the gunners in plying their ordnance.

The Hollanders of late years have got a reputation at sea though for their warlike affairs they have little deserved it, as I have shewed in the First Book, for they never made fight of six ships to six, as is there to be seen. But now of late, and since the truce ended with Spain, and that the Dunkirkers are grown strong and of ability by sea, they have often encountered ship to ship, or two to two, but never with fleet, and more to the commendation of the Dunkirkers than themselves.

Whereas I have shewed every country's manner of fight at sea, and their care to secure

* Small wheels cut out of a solid piece of wood such as were used for the carriages of ship guns.

their men from danger and to annoy the enemy with advantage, instead of cables, planks, and other devices to preserve their men, the Hollanders, wanting natural valour of themselves, use to line their men in the head by giving them gunpowder to drink, and other kind of liquor to make them soonest drunk. Which, besides that it is a barbarous and unchristian-like act, when they are in danger of death to make them ready for the devil, it often proves more perilous than prosperous to them by firing their own ships or confusing them in the fight, their wits being taken from them. Whereas if they had been sober they might have fought in good order.

The Direction of a Fight in a Naval Battle.

The most famous naval battles these late years have afforded were those of Lepanto against the Turks in 1571, of the Spaniards against the French at the Terceira Islands in 1582, and betwixt the Armada of Spain and the English in 1588. In these encounters, wherein the Spaniards had the chiefest part, as I have said before they imitated the discipline of war by land in drawing their ships into a form of fight which, in my opinion, is not so convenient. Though I confess in a sea battle, that shall consist of galleys in a calm, it is better to observe that order than in ships; for men may as well follow direction by their hands in rowing as an army by words of the tongue speaking, or their legs moving.

But ships which must be carried by wind and sails, and the sea affording no firm or steadfast footing, cannot be commanded to take their ranks like soldiers in a battle by land. The weather at sea is never certain, the winds variable,

ships unequal in sailing; and when they strictly seek to keep their order commonly they fall foul one of another. In such cases they are more careful to observe their directions than to offend the enemy, whereby they will be brought into disorder amongst themselves.

Suppose a fleet to be placed in the form of a half moon, or other proportion, to fight. If an enemy charge them home in any of the corners of the half moon they will be forced to bear up room into their main battle, and then will ensue dangers and disorders of boarding one another. Insomuch that it will not be possible for a General to give new directions, but every ship must fight at its will, not by command. For the avoiding of such confusion the Instructions of a General ought not to consist of many words whether he be offendant or defendant, for the greatest advantage in a sea fight is to get the wind of one another; for he that has the wind is out of danger of being boarded, and has the advantage where to board and how to attempt the enemy. So ought the General of a fleet to labour to compass the wind before he put himself to fight, and thus did the Marquis of Santa Cruz labour to do three days before he could get the wind of Monsieur Strozzi at the Terceira Islands, whom he afterwards overcame, and had a great victory over him.*

The wind being thus gotten, a General need give no other directions than to every Admiral of a squadron to draw together their squadrons, and every one to undertake his opposite squadron, or where he shall do it for his greatest advantage; but to be sure to take a good berth of one another, and to relieve that squadron that shall be overcharged or distressed. Let them give warning to

* See *ante*, i. p. 247.

their ships not to venture so far as to bring themselves to leeward of the enemy. For so shall they either dishonour themselves to see such a ship taken in their view, or in seeking to relieve her they shall bring themselves to leeward and lose the advantage they had formerly gotten. For it will be in the power of the enemy to board them and they not to avoid it, which was the only thing coveted by the Spaniards in our time of war, by reason of the advantage of their ships as I have before expressed.

The strict ordering of battles by ships was before the invention of the bowline; for then there was no sailing but before the wind, nor no fighting but by boarding. Whereas now a ship will sail within six points of thirty two, and by the advantage of wind may easily rout any fleet that is placed in that form of battle.*

A Fight with Galleys to Galleys, and Galleys to single Ships.

There is no precedent of these latter times that galleys have been in use in our seas till the latter end of the Queen's reign, when two squadrons of galleys were brought out of Spain into Flanders, the one in the year 1599, the other in the year 1602, the latter commanded by Frederick Spinola,

* This should rather read 'the strict ordering of ships by battles,' *i.e.* the van, centre or main battle, and rear, the quasi-military formation derived from galley combats. Manwaring (*Nomenclator Navalis*) says that square rigged ships could not work nearer to the wind than six points but implies that few of them could do it. He wrote about 1625, and such handiness must have been still more uncommon among the Elizabethan ships. Cf. also John Young's 'Notes' (*post*, p. 204), where he recommends the line abreast and seems to imply that that was the usual formation.

brother to the late Marquis Spinola, who after was slain in the same galleys.*

All the designs of the Spaniards, undertaken against England by sea in the days of Queen Elizabeth, proved unlucky and fruitless, the reason thereof to wise men is not to be marvelled at; for their actions have been grounded on so little judgement that it was no great art to divine their evil success before they were undertaken. Let this act of bringing down the galleys aforesaid be paralleled with their great expedition in 1588, and it will appear they both failed in one kind, that is to say for want of an able and secure port to entertain them upon their arrival in Flanders. For though the galleys had the harbours of Gravelines, Dunkirk, and Sluys at that time, yet such is the condition of these ports that no vessel of their draught can go in or out of them but from half-tide to half-tide; for they are barred harbours, and all the rest of the tide they are dry. So as if a galley observe not her just time of entrance she is subject to the mercy of the sea, the danger of the shore, or to fall into the hands of an enemy. And therefore whosoever thinks to make use of galleys, and not to be secured of a port at all times and tides, will shew himself weak in sea affairs as the Spaniards have done in this and in their expedition of 1588, as I have before declared.

The proper use of galleys is against galleys in the Mediterranean sea, that is subject to calms, and where both Turks and Christians strive to exceed one another in that kind of vessel, he accounting himself master of those seas that has the greatest number and best ordered galleys. And such was the blessedness of God towards the

* See *ante*, ii. pp. 109, 190.

Christian commonwealth, that, in the battle of Lepanto, in 1571, he gave a most happy and victorious overthrow to the cruel and misbelieving Turks, who since that time have not been able to hold up their hands or heads against the Christian forces within the Mediterranean sea.

Next to the valour and well marshalling order of the Christians' navy of galleys, the next attribute is to be given to the galleasses of Venice, which, though they were but six in number, yet such is the advantage of those vessels against galleys that they did the Christian galleys treble the service of their number. You must know that a galleass is built like the Vanguard or Rainbow of his Majesty's, low and snug by the water, and carries the force of a ship in men and ordnance. But the thing that gives her advantage in fight is her oars ; not that there can be expected any swiftness in rowing, but with her oars she is of that agility that she is able to wind about as she sees occasion to damnify her enemy. Whereas a ship lies like a log of wood, not able in a calm to help herself or to have the help of a rudder to guide her.

If galleys be forced to fly from other galleys, and not of speed to overgo them, they fall into the mercy of those that chase them ; for it is to be considered that the strength of a galley is in her prow, where she carries her ordnance, as I have before declared. For unless it be some few choice ones of Malta or the great Turk, no others carry artillery to shoot astern. So that of necessity those galleys chased must either yield, be burnt, or sunk.

In a desperate case, where galleys in battle are in danger to fall into the hands of an enemy, they have no other remedy but to proclaim liberty to all the slaves, conditionally that they will fight

for their defence, and thereupon to deliver them out of chains and put arms in their hands. This was the safeguard of Don John of Austria, in the great and famous battle of Lepanto.* The chief annoyance that can be done a galley in fight is to devise the destruction of the slaves and oars, for without them galleys are of no use. And therefore be they galleys, or ships that fight with galleys, they must seek with cross-bar and langrel shot to hurt and spoil their men and oars. And in this case a ship that carries her ordnance low, and hath her hull high built, has a great advantage of a galley, for her ordnance will lie level with her, and being ahead or astern of her she may have the fortune with a cross-bar shot to take away the whole side of her oars, and if the galleys be forced by desperateness to attempt to board the ship then, by reason of her height and high charging, they shall not be able to enter her. The manner of galleys fighting with one ship is to be compared to a dance called the Irish hay, that journeys two and two together, for so do the galleys when they come to fight keeping one of them continually playing on the ship. Six galleys make three couples; and they being astern, one to another, according to the form of the dance, and the headmost galleys discharging their prows, they shove astern of the rest giving place to the second couple. And they in like manner discharging their prows give place to the last who, having discharged in the like sort, the first is ready to take their rank again and to bring but two of themselves into danger at once. It is to be understood that most ships, however great and warlike they be, carry not above four pieces commonly in the stern

* Don John freed the Christian slaves, but the Mahommedans were secured more closely.

which is the place of most importance. Most galleys carry in their prows four pieces, besides their cannon in the coursier ; * here you must allow thirty pieces for four, and to lie at a greater advantage than the four in that they lie low by the water and the galleys standing still.

As I have promised before, I will take occasion to speak something of his Majesty's royal ship the James Regis, and her disadvantage to make a defensive fight, as she is now built. Ships of much less burthen than the James have four pieces of ordnance placed to shoot astern, as namely, two in the gun-room, and the other two in the upper gun-room, which is commonly used for a store room, lodgings, and other employments for a General's or captain's use and his followers, which is done without prejudice to the two pieces.

Above these two gun-rooms, aforesaid, was placed the captain's cabin, with the open galleries astern and on the sides, that fowlers and lesser pieces might be thrust out for defence and small-shot placed to defend that part of a ship. In these two gun-rooms, aforesaid, where the four pieces are usually placed, the James carries only two, and that is in the lower gun-room. For the upper gun-room is converted into the captain's cabin, and a rafter † and two sided galleries are made close, that cannot afford so much convenience as for a man to look out of them but through some narrow windows. Insomuch, that if a General or captain have occasion to give or receive directions he must do it upon the poop or the deck of the ship, to the great inconvenience and loss of

* See *ante*, i. p. 386, note 85. The coursier was the long central gangway of the galley ; the heavy gun was at its head.

† Qy. rafted.

time and opportunity what sudden occasion soever should offer.

Moreover, if a ship by mishap shall take fire, out of her open galleries water may be suddenly drawn and prove both the safety of ship and men. Whereas being close, as now they are, there will be no remedy to quench them. It may be compared to a round pigeon house into which people fly from an enemy for refuge; and what defence can such a house make that is compassed about with foes? No more than to yield to fire and water.

Now compare the James, by the true description I have made of her, but with one or two galleys in a calm, having no ship near to assist her. Considering she carries but two pieces in her gun-room with what ease and little danger a galley may run up in her stern and with her prow and small-shot put her from her two pieces; for every galley carries four pieces ahead, besides her cannon in the coursier, which piece lies more to the advantage than the other two, in that they are placed low by the water, and the galleys standing still they may shoot as steady out of her as out of a platform. Indeed this cannon in the coursier is of greater danger and annoyance than all the rest; for it lies at an even stay, and not to be moved nor traversed one way or other. The use to be made of it is for the master to bring the mast of the ship and the mast of the galley both in one, and then to call to the gunner to give fire; by which means it is impossible to miss the ship and hazard sinking of her.

And as the James lies open to galleys, as I have shewed, so does she in like manner to such ships as shall board her, either afore in her prow or abaft in her stern, where she has no defence either of her forecastle or close-fights. There are

many other necessary uses to be made of an open gallery, which at this time I forbear to speak of, and will return once more to treat of the nature of galleys.

If it were in my choice I would rather have two ships of two hundred tons each to encounter six galleys, than one ship of a thousand tons to fight two galleys, for these reasons:—my two ships of two hundred tons I will bring athwart the hawse of one another that, whereso-ever the galleys shall charge me, I will have a broadside to play upon them; whereas in one ship alone I have only my stern for my defence, where two galleys with their small-shot will soon beat the gunners from their ports with little danger to themselves, for no great number of small-shot can play upon them out of the narrowness of the poop. By which means they will burn, sink, or destroy any such ship with long firepikes made on purpose.

And for security of myself and men I will dis-place three or four banks on a side in my galleys, and in that space make a bulwark with gowns, beds, sails, and other things that no shot from the ship shall do me hurt. And if in fight I shall happen to be shot under water, it will be an easy thing to stop any such leak by making the slaves heel all on one side of the galley. So that if it were as low as the keel I will come speedily to it and stop it.

How to employ such People and their Stocks in Galleys, as are sent to Houses of Correction; and the Use that may be made of Galleys in England.

WHOEVER have the charge of these houses seek only their own gain, not the use for which they were instituted. People are punished or pardoned as they are able to gratify their keepers: their labours or liberties are according to their abilities; for, as I have said, the rich buys his ease, the poor is threatened with cruelty, which has caused that desperateness in men towards their keepers that to be revenged they have slain them. And yet I see no decrease of vagabonds by the course taken in the houses of correction.

The Benefit of employing these People and their Stocks in Galleys in England.

The time of men's imprisonment in galleys is to be limited, some for life, some for years, more or less according to their offence, but none under seven years; by this means there would be a riddance of lewd people for life or years. At the end of which time they ought to procure service, or be bound to work in their occupations which they shall be taught in their galleys; but if they shall refuse it, and continue still loitering, then to send them into Virginia, or other colonies planted by us. If they shall escape out of their galleys before the expiration of their time, to have a proclamation that no man, upon certain penalties, should harbour or give them entertainment. And that they may be known from others they must be shaved both head and face, and marked in the cheek with a hot iron, for men to take notice of them to be the King's labourers, for so they should be termed, and not slaves. And if any such be found that cannot give a good account of his discharge out of the galleys, to be apprehended and sent back again, which would be a means that none of them ever after will offer to escape.

This course being carefully observed the vagabonds will be soon lessened. For the terror of galleys will make men avoid sloth and pilfering and apply themselves to labour and pains; it will keep servants and apprentices in awe; it will take away the occasion of pirates and piracies: it will save much blood that is lamentably spilt

by execution of thieves and offenders, and more of this kingdom than any other. It will take away the occasion of women vagabonds, when such rogues and thieves shall be restrained from gadding, for such men are enticers and drawers of women to lewdness. If all these mischiefs may be prevented, and the kingdom strengthened, without further expense than now it is, no man but must commend this project and give his furtherance to it.*

* The proposal to maintain a permanent service of galleys was not new. Some comparatively large ones of the Mediterranean type had been built by Edward I. and Edward III., but the inherent distaste of the free Englishman for the mechanical drudgery at the oar had rendered abortive any attempt to keep up a free service, and, although there must always have been plenty of vagrants available, the idea of utilizing them does not seem to have appealed to any monarch before Elizabeth. It is also probable that galleys were found to be of little utility in the stormy northern waters and very expensive in comparison with the sailing ship. Henry VIII. was always eager to try any experiment likely to improve the efficiency of the Navy and, knowing the galley only by repute, desired to introduce it again experimentally. In 1541 he sent to Italy for some shipwrights experienced in galley building and one was launched in 1544. By 1551 the Crown possessed three which were said to serve 'lytle purpose'; the oarsmen of these galleys were probably either paid volunteers or prisoners of war. Until nearly the end of Elizabeth's reign there was only one galley on the Navy list, but Hawkyns seems to have thought with Monson that forced labour might be used. He was not Navy Treasurer in 1576; he did not succeed his father-in-law, Benjamin Gonson, until 1577, but Gonson was ill and it may have been at the suggestion of Hawkyns, who did much of his work before he resigned, that the practice of sending felons to the galleys under authority of a commission, came into use. Some one, probably a lawyer, objected to this and held that the galleys should be reserved for 'valyant rogues,' that is able-bodied vagrants (*Lansd. MSS.* 22, f. 164). However, the experiment of 1576 must have been on a very small scale and led to no decisive conclusion, because in 1589

we find Hawkyns, in making estimates for the equipment of the Galley Bonavolia, writing that 'we are not yet in the experience' of the necessary victualling allowance for the 'slaves.' As the Bonavolia cost 514*l.* a month in commission, that is to say as much as one battleship or as two cruisers, it was certain that under Elizabeth's economical administration there would be no likelihood of any galley service on a large scale unless the expense could be reduced considerably. That this was found to be difficult may be the reason why no galleys were built, and the subject was dropped until Spinola's enterprise in 1599 in bringing up galleys from the Mediterranean (*ante*, ii. p. 109) brought the possibility of meeting them with a similar English force under consideration Perhaps a knowledge of Spinola's scheme and the intention of preparing for it was the political occasion of the statute of 39 Eliz. c. 4 by which 'dangerous rogues' were to be sent to the galleys; this was the first, and only, statute in English legislation relating to a galley service. In 1602 the Council ordered that able-bodied offenders sentenced to death, and not notorious and dangerous criminals, were to be reprieved for the galleys; their friends, or their county, were expected to pay £3 a year for the support of each (*Cecil MSS.*, 24 July, 1602). In 1601 and 1602 four galleys were built, but as Spinola was found to be much more harmless than had been expected and partly, it may be, by reason of the inherent difficulties connected with the administration of galleys and their use in the Channel, they were never used at sea. These four lingered out an existence in harbour and were the last used in the Navy in home waters, but Charles II. kept two in commission in the Mediterranean in connection with Tangier.

Provisions to maintain the Slaves, and the Labour they shall be put to, Winter and Summer.*

THEIR diet shall be certain, not according to the miserable rate they are allowed in houses of correction, where it is proportioned according to their earning by their labour. For, in the galleys, each man shall be allowed two shillings and sixpence a week for his diet, to be husbanded by men appointed by the slaves themselves for their best advantage. Every galley shall be allowed a surgeon, a physician, and an apothecary-general for them all: their apparel to be two suits a year, the one for summer, the other for winter, with a gown of frieze. Their labour to be at the oar in summer; and when they are not so employed they may lawfully use any means for their maintenance, as in knitting, sewing, or any other such kind of work. For no summer labour, more than rowing, shall be required at their hands; and, by the way, I will tell you for a jest that, when I was prisoner

* R. has 'The King's labourers, which is a word more proper than slaves to their oars, may upon all occasions be employed upon general works as, for digging for stone in the island of Purbeck, in building sconces and castles for the defence of the shores, in knitting nets to furnish our ships, and many other works that may be convenient hereafter to be thought upon.' The Churchill text has 'King's labourers' instead of 'slaves,' but the MSS. have 'slaves' throughout. Seeing that in 1593 the Council ordered 'two lewd fellows' to be delivered to Hawkyns to be 'fast tied with chains' in the galleys, perhaps 'slaves' would be the more appropriate word.

in the galleys of Spain in 1591, all our Englishmen that were thither committed, amongst other occupations, framed themselves to the trade only of making dice as an occasion to set the Spaniards together by the ears.

In winter they must be had ashore and kept safe in some strong castle, where lodgings and beds, with necessary stocks and tools must be provided to set them to work, as namely, forges for smiths, leather for shoemakers, hemp to make ropes, mills to grind corn, or what else that can be thought of. And such as have been bred to husbandry may be hired to farmers for their winter's work, binding the farmers to return them at the season of the year to the galleys; which they may securely do, for it will not be in their power to escape, by the course which is formerly taken.

The Use of Galleys in time of War.

I have formerly, in the Second Book, said something concerning the use of galleys, which you will find there, and in this book the manner of fight with galleys. But having occasion to treat more largely of the convenience of galleys for the coast of England I will reiterate some points concerning that purpose.

1. Galleys are of no use to encounter a fleet at sea, in respect of their strength, but against single ships in calms that cannot come to rescue one another.

2. The use of galleys is to tow a fleet out of harbour which is kept in by wind and tide, which is a thing of consequence either in peace or war.

3. The use of galleys is the convenience to land an army, both suddenly and safely, and to

take advantage in landing, both when or where they list: by example of the Marquis of Santa Cruz, who, arriving at the Terceira Island, attempted landing at Angra, the chief town of that island, and whither the inhabitants drew their forces to withstand him, which, when he saw, he altered his purpose and suddenly winded his galleys about and landed at the bay of La Plaia, five leagues from thence, without resistance.

4. The use of galleys is to annoy an enemy in his landing, by cutting off his boats and men as they shall offer to land. And the like would have happened to us at Cadiz if we had landed where we attempted it the day before, and where our projectors of that voyage had designed us if we had not been prevented by foul weather; for there we found four galleys placed to lie betwixt the shore and us, to cut off our boats, and thereby to have overthrown our action.*

5. The use of galleys is against a fleet at anchor, who may tow fireships amongst them and either burn or put them from their anchorage. And it may happen in a place near shoals or sands, or upon a lee shore, and so destroy a whole navy.

6. The use of galleys is to prevent the like stratagem. For if such ships be set on fire, with galleys they may be rowed unto and hooks cast on board them, and so tow them wide of their fleet, where they may burn without endangering the ships they attempt.

7. The use of galleys is in succouring an island that is invaded by an enemy; as for example, the Isle of Wight, with galleys, may be suddenly

* B. and R. have '. . . landed where we attempted the day before the taking the town, four galleys that lay betwixt us and the shore had cut off our boats and overthrown our action.'

supplied both with men and ammunition from the main land, in despite of what ships or force shall lie to hinder or intercept them.

8. They ought to be kept for reputation; for as his Majesty is King of all kingdoms for goodness and greatness of his Navy, so it should be said there is no kind of vessels that other princes can shew but what his Majesty has the like in use. And it will be the more strange in that no country nor harbour in Europe, to the northward of Lisbon, can shew the like.

If at any time a war happen betwixt his Majesty and the King of Spain, or betwixt him and the Hollanders, having the ports of Flushing and Sluys for the receipt of our galleys we may much annoy the harbours of Flanders, and their trade; or having the harbours of Flanders for our retreat, we may as much, or rather more, impeach Holland, but especially the province of Zealand and the island of Walcheren. For, besides the hurt we shall do them at sea, we may watch and take the height of a spring tide in a calm, and be able to cut their banks to give the sea entrance into their country and hazard their destruction.

* But speaking of galleys and Lisbon in the eighth article, I will say something that had been more proper to have been inserted in the First Book, where the taking of the carrack is treated of; because one of my scopes, in that book, is to shew the errors committed in the warlike sea-actions betwixt England and Spain.

In the describing the manner of that fight you shall find that the eleven galleys were placed under the neck of a rock, as we should enter into the road; and that at my coming to an anchor I

* I have no MS. authority for the three following paragraphs.

routed and forced them to fly under the castle of Cezimbra, where they drew themselves into a body as they had done before. But yet they found my ordnance of the same nature as when they were under the rock, for when I hit one of them my shot passed through most part of the rest, with so great hurt to them that, in conclusion, disgracefully they quitted the road and escaped to sea, two excepted, which we took and burnt.

But if these galleys had, when they quitted the neck of the rock, as I have said, retired, whither they did, under the protection both of the castle and carrack, and instead of linking themselves, as it were, together, had divided themselves one hundred paces from one another and played upon us with their prows, each of which carried five guns, they had been a narrow mark for us to hit. And what hurt we could then do them was only to her we lit upon; whereas, in the course they took, hitting upon one we passed through them all. And, moreover, where they retired they brought themselves into shoal water so that our ships could not come at them. And if they had not quitted the road they would have cut off all treaty betwixt our boats and the carrack, and given relief to the carrack from the shore, that it had been impossible for us to have taken her. The Spaniards may allow of this oversight as one of the greatest they committed during the war.

Other uses Galleys might be put to.

Galleys may attend his Majesty's fleets at all times when they go to sea, from Chatham till they bring them clear of the sands. And if it happen any of the ships should unluckily come aground, by the force of galleys she may be instantly hauled

off again, without hurt to the ship. In this case a galley might have been the preservation of his Majesty's ship the Prince Royal, at the time the Queen of Bohemia went over, who struck upon a sand at the Ness * and put her into great peril, if there had not been present help of boats of other ships of the King's that rid there.

Galleys may pass the seas in a calm when ships and barks cannot, and boats dare not, for fear of enemies; and so prevent the surprise of packets or intelligences, as lately we found to the prejudice of merchants' affairs, and dishonour to the King.

The galleys may at all times, both winter and summer, carry provisions for his Majesty's ships from London to Chatham, and ease the charge of transportation. As also in summer they may do the like to his Majesty's ships at Portsmouth; for barks often go in danger, and more especially if we have wars with France, Holland, or Dunkirk.

The fittest Place in England for Galleys.

Because I have formerly named the Isle of Wight by way of comparison,† I will say of that island that it is not only the best and fittest place in England, but in Europe, to entertain galleys, considering the two harbours within it, the one Newport, and the other New Town, besides three others in the main land opposite to it, *viz.* Portsmouth, Hamble, and Hampton, where galleys may

* The sands facing the coast of the Isle of Sheppey. Shire Ness and Shell Ness are the two points giving on the North Sea at the extreme ends of the island. There was also White Ness, now Fore Ness, just north of the North Foreland.

† *I.e.* illustration.

ride afloat without coming aground, which no other harbour can do betwixt the river of Thames and Portsmouth.

For suppose the galleys coming betwixt the Thames and the Isle of Wight are taken with a storm at south, or being chased by an enemy and forced to seek a harbour for succour; if they bring not the tide with them they perish, either upon a lee shore or upon the pursuit of an enemy. And as I have shewed there is no place to compare to those aforesaid for the receipt of galleys, so there is no place so commodious for the slaves to reside in the winter time as the island; adding to that the castle of Porchester, two or three miles from Portsmouth by water, being a place of security for the slaves to abide in; room sufficient to entertain five or six hundred of them, with their manufactures, instruments, and tools that may be set up to get their livings withal.

A Proportion of Soldiers and Sailors for five Galleys, and the Charge to maintain them.

You cannot allow less than fifteen soldiers and a hundred slaves for each galley, every slave to have allowed him 2*s.* 6*d.* *per* week for his diet, and the soldiers 4*s.*, which amounts to 3338*l.* per annum.* Every slave to have two suits of apparel and a gown, to be rated at 1000*l.* One physician at 40*l.* per annum and every galley its surgeon at 20*l.* a piece per annum. The General 20*s.* per diem, the Vice-admiral 10*s.*, all which amounts to 628*l.* The masters, mariners, gunners and other officers to be valued at 800*l.* per annum, all which will amount to 6000*l.* a year, more or less. The soldiers not to have any allowance of pay but in

* *Sic.*

victuals, for they should be such soldiers as have entertainment for hurt and lame soldiers in the shires; only their diet shall be provided for.

How this Money may be raised.

A certificate from all the shires in England what the contribution of the houses of correction do amount unto by the year, and to have it thus employed in galleys. And what shall want of 6000*l.*, to maintain them, to be saved out of vain and superfluous gormandizing, which is too much used in many set feasts and more to the imputation than commendation of our nation, especially in the halls and companies of London; the half of which may very well be spared and employed to this necessary use. For people may meet in a civil and friendly conversation to maintain their customs, and to determine their affairs, with half the expense they are now at. Thus will no man be put to any charge nor any feel the loss of it. For there is no man invited to these feasts of so mean a rank and condition as to value the gift of five or six meals, more or less, in a year.

Another means to raise money towards this good work is out of hospitals, now grown into a marvellous abuse; and that especially erected by Sutton in the Charter House. For no man is now admitted into it but such as can buy it for money; and having money there is no exception to his quality, whether young or old. Neither is this hospital alone, but all others in the kingdom, which I refer to the examination and reformation of those that shall be appointed to overlook them.

I verily believe, if the Founders' gifts of those hospitals were now to be bestowed, and galleys

upon the reasons aforesaid to be erected, they would, or such hereafter will, convert the charitable benevolences to the use of galleys rather than to hospitals, since they live to see the abuses of such houses. For what they shall give to maintain galleys would prove a strength to the kingdom, a means to save the lives of many men that otherwise should die by the gallows, a remedy against enormities, thefts and idleness of people, a cause to make safe and peaceable travelling by land and sea, and a course to relieve more poor people, by five to one, than the hospitals do.

* There are many other ways, too tedious to set down, how to uphold this work that shall no way prejudice either King or commonwealth. Which I refer to after times to consider of, when it is on foot by certain commissioners that must be appointed for that purpose.

* Instead of this paragraph B. and R. have 'And as their gifts will prove more charitable and useful than they can otherwise dispose of them, to honour the benefactors the more, besides the records that will give testimony of their charity they ought to have their pictures with inscriptions placed for all men to behold, which will not only revive their memories but encourage others to follow their example. It is intended by this proposition that whatsoever should be raised out of the surplusage of the labour and pains of the slaves in winter to have it employed either in erecting more galleys, in easing the country of their payment, or in building hospitals for the sick and lame aged galley slaves. All which is to be employed by the discretion of twelve commissioners appointed for the overseeing of it.'

The Ceremony of wearing the Flag, and the Use that is, and may be made of it.

I HAVE formerly shewed, when I treated of the office of the Vice-Admiral, how every Admiral, and Admiral of a squadron, was to carry their flags and each ship under them in their squadron. Now it remains for me to speak more particularly of the flag and the use and custom of it at sea; for it is the standard under which all the fleet marches as soldiers do under their ancient by land.

England, as I have declared, truly challenges the prerogative of wearing the flag, as the sole commander of our seas, and so has held it without contradiction, for no mention is made of the beginning of it or that any nation hath opposed or contradicted it.* The privileges are these:—that if a fleet of any country shall pass upon his Majesty's seas, and meet the Admiral's ship serving on those seas, they are to acknowledge a sovereignty to his Majesty by coming under the lee of the Admiral, by striking their topsails, and taking in their flag; for it is intended that no ship ought to wear his flag in sight of the Admiral. The other Admiral is to strike his topsails three times and hoist them again, and take in his flag three times and advance it again. This hath never been questioned, out of stubbornness resisting

* R. has marginal note: 'The duties other nations owe to the Admiral of England.'

the King's authority, but rather out of want of knowledge and ignorance, as appeared in the case of King Philip II. when he met the Lord Admiral of England, when he came to marry Queen Mary.

But though this privilege be granted to his Majesty, and his deputy upon the seas, yet every ship of the King's, that serves under an Admiral, cannot require it if he be out of sight of the Admiral. But the other stranger, be he Admiral or no, is to strike his topsail and hoist it again, to any one ship of the King's that shall meet him.*

Or if any such ship or fleet belonging to any other prince shall arrive in any port of his Majesty's, or pass by any fort or castle of his, in their entrance, and before they come to an anchor, they must take in their flag three times, and advance it again, unless the Admiral's ship be in the same harbour ; then they are not to display it, but to keep it in so long as they shall remain in the presence of the Admiral. But if any other ship of his Majesty's be there but the Admiral, they are not bound to keep in their flag but only to strike it thrice, as aforesaid.

† This case bred a great question in 1613, when the Earl of Gondomar came ambassador into England, being accompanied by two galleons of the Queen of Spain's who arrived at Portsmouth, and as he passed by Stokes Bay, there rid a ship of the King's, that was neither Admiral

* There is no MS. authority for this paragraph of which the clauses are contradictory. If Monson ever wrote it he probably said ' cannot require it *unless* he be out of sight of the Admiral.'

† This story about Gondomar is not in the MSS. used for collation.

of the Narrow Seas, nor had employment under his commission. This ship required the two Spaniards to take in their flag, as a duty due to his Majesty's prerogative on the seas, which they refused to do, only they struck their topsails, till they were compelled to it. This act was complained of to my Lord Admiral by the ambassador, who found himself and his master injured by it. It pleased my Lord Admiral to confer with me about it ; and out of his long and ancient experience concluded that they were not bound to strike their topsail, as they were required, unless the King's ship had been Admiral of the Narrow Seas : and this I set down from the long experienced Admiral the Earl of Nottingham. But I am not lavish in speaking of it, whensoever I hear an argument upon this subject of the Narrow Seas disputed, because in these latter times both the French and Hollanders seek to usurp on his Majesty's right. I will therefore wish that his Majesty's ships would take more authority upon them than is due, because I would have their insolence curbed.

If any merchant's ship shall neglect to do their duty, as aforesaid, to any ship or pinnace of his Majesty's, that ship or pinnace is to shoot at her, and to bring her to acknowledgement of her error by force. Which being done, the ship thus offending is to pay the value of powder and shot spent against her by the King's ship, and the chief commander on board her is to be imprisoned if the commander of the King's ship please.*

* In practice refractory masters of merchantmen were not punished at the discretion of a single man-of-war captain. If the incident happened in the presence of a fleet they were tried by court-martial ; otherwise prosecuted in the Court of Admiralty. Masters of English merchantmen were often

If any ship of the King's shall pass by any fort or castle on the shore, out of ancient and foolish custom they have used the same reverence that merchants and strangers use to do, save only striking their flag which is a thing improper, and indeed most ridiculous, for one of the King's ships to dowse her topsail to his castle, both of them being his own ; and it is as much as for a man to put off his hat to himself. And besides, it may happen at such a time, tide, and place that the striking a topsail may endanger a ship upon a rock, shelf, or shore. Therefore it is necessary to take away this ceremony that has neither ground nor reason in it.

All Admirals in the King's service, were wont to carry anciently the St. George's flag in the head of the topmast. But since King James coming to possess this Crown he has added to it the cross of St. Andrew, as due to Scotland, which, though it be more honour to both the kingdoms to be thus linked and united together, yet in the view of the spectators it makes not so fair a show as the cross of St. George only, if it would please his Majesty to consider it. Besides those crosses of

reluctant to yield the salute because it was becoming, not an acknowledgement of the sovereignty of the King, but an obeisance to the majesty of the man-of-war. They felt instinctively that it was an indignity that they, representing the senior service—the mother service from which the war navy had but recently separated by a material evolution which was an actual ethical degeneration—should be compelled to lout low to an upstart daughter. They knew that their ancestors, in merchantmen, had won such sovereignty of the sea as existed and the Navy had not yet conquered its claim to respect, yet that the captain of a man-of-war exacted the salute in a spirit which shewed that he held it to be a mark of deference to himself personally as the commander of a fighting ship. Often, at this date, the deep-sea merchantman could have blown a small man-of-war sky high.

England and Scotland, carried as aforesaid, the cross of the arms of England is peculiar to the Lord High Admiral of England, who is, and no other, bound to bear it when he goes to sea, which flag, in truth, carries a princely show when it is displayed.

* As the Lord Admiral of England has the only privilege to wear the standard of England in the main top, so has he likewise power to permit and suffer another man to wear the bare English flag in the main top in his presence, which case I am able to instance; and, besides this that followeth, there are few precedents, as I conceive.

In the year 1596, and the Easter before the taking of Cadiz in Spain, Calais in Picardy was beleaguered and taken by the Archduke Albert and his Spanish forces, which made the Queen weigh how much it concerned her not to permit the neighbourhood of the Spaniard, her then enemy, so near her. Hereupon with all celerity she raised land forces to give succour to Calais, and appointed the Earl of Essex commander of them. No nobleman or gentleman of spirit but voluntarily put himself into action, as, namely, the Earl of Southampton, the Lord Borough, the Lord Mountjoy, the Lord Rich, the Lord Compton, the Lord Bourke of Ireland, Don Christopher, son to the pretended King of Portugal, with divers others, who were on board me in the Rainbow at supper, and our foresail cut to stand over, even as news was brought of the taking of Calais. The Lord Admiral, who was never backward to do his prince and country service, hastened down to Dover to secure the seas, and embarked himself in the Vanguard, as my Lord of Essex had done in

* From here to 'continent of France and it' (p. 126) does not occur in the MSS.

the Rainbow with me. Whereupon I took in my flag, and acknowledged my duty to my Lord Admiral, notwithstanding the greatness of the persons on board me; which my Lord Admiral perceiving, commanded me, though my Lord of Essex should oppose it, to wear the flag with him equal in the top as long as we were in company together, which I did though at first it was resisted by my Lord of Essex. And though the journey to Cadiz succeeded immediately after this, and my Lord of Essex had the privilege to wear the English flag in the main top in company of my Lord Admiral, who went likewise in that expedition, yet the time and case must be considered; for they had both equal authority by land and sea, under the Great Seal of England, which made their command alike.

In the year 1588, when the Spaniards appeared on the English coast with their fleet, a galleon of theirs being distressed arrived in the port of Havre de Grace in Normandy, which being known in England, three ships of the Queen's and one pinnace were sent to surprise her in harbour, as I have shewed before, myself being in that fleet.

Mr. Knyvet,* a gentleman of the Queen's privy chamber, was sent to sea at that time with certain merchant ships, to strengthen my Lord Admiral's fleet, fearing the Spaniards would return again from the northward whither they were gone. This fleet of merchants, and Mr. Knyvet, was to join with four ships of the Queen's, of which he was appointed Admiral, though it was a merchant ship in which he served.

And that power may the King of England grant to any subject of his, notwithstanding his

* Thos. Knyvet, afterwards Lord Knyvet of Escrick. See N.R.S., *Armada Papers*, pass.

former patent to my Lord Admiral of England. And yet I am of opinion that, within the compass of the Narrow Seas, if any such Admiral shall be appointed by the King and meet the Admiral's ships serving on the Narrow Seas, who is deputy to the great Lord Admiral that such ships are there serving, the other is to take in his flag in his presence who doth wear it as substitute to the Lord Admiral within the jurisdiction of the Narrow Seas, he having a former grant, and supreme authority before the other's employment.

How far the Narrow Seas extend is much controverted betwixt the French and us, they challenging, rather by words than right or precedent, half the seas betwixt England and France, as some of Flanders do by the same reason, but I could never hear that ever they contested with us about it. England's claim to the Narrow Seas needs no other repetition than I have formerly related, *viz.* a consent of all nations, an everlasting possession, and an invincible power to maintain it.

Though to speak truly, in my opinion, if from headland to headland be measured in France with a line, what seas, or rather bays, shall fall within that line, or within those capes, do properly belong to France, and may be termed the King's Chamber, if so be we had no title to France ourselves. But if you will see what share of the sea may belong to them by this measure it would not be worth contesting for, as may appear by the following :—Beginning at Calais Cliffs with a direct line from sea-head to sea-head to the Hague, and from the Hague to Ushant ; but this last we will not acknowledge, though there were right in the other ; for in that bound lie the islands of Jersey, an ancient patrimony of England, and

possessed by us near four hundred years. And what title soever France can invent to themselves for that circuit of the sea, the same we may plead by Jersey, that fronts upon the continent of France and it.

A General that shall be invited to banquet on board another ship, or have occasion otherwise to come on board any other ship of his fleet, how small soever she be, that ship shall carry the flag of the Admiral, and be so reputed, so long as he shall remain on board her. And the flag borne in his own ship shall be taken down till his return ; for it is the man, and not the ship that has the authority of an Admiral from a prince.

The shewing or taking in the flag in the Admiral's ship being well considered and resolved of beforehand, and directions accordingly delivered to the rest of the fleet to follow his working, he is able to direct a fleet in many cases as fully as though he had given his instructions by writing.

The flag carried under the poop of a ship shews a disgrace, and never used but when it is won or taken from an enemy.

Many times ships wearing contrary flags, and especially the colour of an enemy, it hath wrought many effects to the advantage of him that carries it, or may do again as occasion shall be offered at the time it is to be put in execution.

When an Admiral is in harbour or road with the rest of his fleet, at the taking in of the flag in the evening and shooting off a piece of ordnance he sets his watch, which his fleet must take notice of, and accordingly set their watch. The like is to be done at the discharge of the watch in the morning ; as also when he shall weigh anchor and set sail.

The flag in the top half furled up, and so worn, some are of opinion is as great an acknowledgement

as though it was absolutely taken in. But neither that ceremony, nor the taking in the flag and advancing it thrice, gave me satisfaction when I served on the Narrow Seas. I compelled the Hollanders to take in their flag absolutely, which they took in such evil part as that they cast a great envy upon me for the same.

Many times an Admiral will take in his own flag and suffer a smaller ship to wear it as Admiral, counterfeiting himself to be a prize to the ship that wears the flag, to put his enemy in security of him till he hath brought him into his clutches.

In some cases an Admiral will suffer many ships to wear their flags as Admirals, and seeming to be of divers nations, and their ships to work like merchantmen, because they shall not be taken to be a fleet of ships of war till he has an opportunity to charge them, and then to take upon him his right shape.

Laws enacted for the Punishment of Offenders at Sea, in the Days of King Richard I.

It shall now appear that the war by sea is no new practised thing by this nation, as I have shewed in the days of Edward III., when there were armed out of England eleven hundred warlike vessels, a number far exceeding us in this age if we should go to muster them. Yet not equal to us, if we consider what art, experience, and skill hath taught us in sea-causes since then that the invention of artillery, shot, and powder has been in use; for, by all likelihood and reason, a few of ours were able to exceed all theirs in strength and ability. If we examine and compare the times and ages together there is a great difference betwixt the condition and build of ships now and then, for it cannot be denied that since the days of Edward III. new worlds have been discovered, able to equal more than the rest known before, which discoveries have caused greater traffic, and by consequence the increase of more ships than in those ancient times. Especially the secret of the bowline and the use thereof, which since then hath given light to a more ready and easy navigation to perform voyages with greater celerity and facility than they then did.* And therefore if

* I do not know what is meant by 'the secret of the bowline.' The bowline, and 'sailing on a bowline,' had been in use, and practised, for centuries; it was certainly known early in the fourteenth. Perhaps Monson had stay sails, then recently introduced, in his mind.

their goodness of ships had been equalled by their numbers by some future sign or other it would have appeared. But for my opinion I do verily believe that the most part of their ships in those days were made of osiers, or other kind of light substance, and covered with hides for defence and safeguard of the sea. It may be alleged that a ship so built, now in this age, cannot be made to brook the waves of the sea, the winds and weather being so outrageous as we find by experience. But in answer thereof, in all likelihood the difference of times has made the difference of weather; for the weather is like the world and people dwelling in it, that as they grow old they have the less vigour and strength, and consequently will be worse and weaker by the continuance of it, and will by little and little decline, as no doubt it has done since the days of Edward III. For there is no old man now living but will confess that the temper and calmness of the weather in the time of his youth did far exceed this of our elder years. And the like will his son do after him, when he come to the state of an old man; and still follow one another as long as the world shall last.

Mariners have an observation that the three years before, and three years after the prime, which happens every nineteenth year, the weather proves more boisterous and stormy than the rest of the time, and every year, commonly, worse than the other. Then what would a ship find if she were built after the manner of vessels four hundred years ago, and sent out into the main sea?

But leaving this argument to men of better judgement and learning than myself, I will prove the antiquity of sea actions, undertaken by our nation and the Kings thereof, long before the

enterprise of Edward III. formerly spoken of. I will begin with Julius Agricola under the Romans' government, that first sailed about England and Scotland, and the first that discovered the islands of Orkney, which he subdued.*

The second was the great action of King Eadgar the Saxon, and King of this land, who, with eight hundred sail of ships sailed round England and Scotland, not once, but often.

And the third I am to take notice of is Richard I. and his glorious expedition against the heathen Saracens, in which journey he established the following laws, which in some points have continued in being ever since, but not with that rigour and severity as in times past.

Laws erected by King Richard I.†

I. Whosoever shall kill any man a shipboard, shall be bound to the back of the party killed and thrown into the sea with him.

II. If one should be killed on land, the party should be bound in like manner and buried alive with him killed.

III. Whosoever shall draw any knife or weapon with an intent to draw blood, or by other means shall draw blood, shall lose his hand.

IV. Whosoever shall strike one, without drawing blood, with his hand or otherwise, shall be ducked three times at the yard-arm.

* The campaigns of A.D. 80–84. But in A.D. 70 a legion was brought over from Britain to assist in the suppression of a revolt on the Rhine and was probably transported, if not in British ships, by a division of the Romano-British squadron.

† Said to have been promulgated by Richard in 1190 at Chinon, on his way to Marseilles. They are probably far older than the time of Richard I. who may have re-codified them.

V. Whosoever reviles or curses another, for so often as he hath reviled shall pay so many ounces of silver.

VI. Whosoever steals shall have his head shorn and boiled pitch poured on it, and feathers strewed upon the same whereby he may be known; and at the first landing place where he shall come, there to be towed ashore.*

† Admirals at sea have the same authority as Generals have by land, and of as great antiquity. Some are of opinion that Admirals were instituted in Greece by Constantine the Great; though modern times say they were erected first in France, others in Spain, and in the year 1246, in the reign of Don Ferdinand III.‡ But let other countries pretend what they list for themselves, our records and commissions do prove a more ancient right than those of latter times.

* The punishment of towing a thief ashore astern of a boat was certainly in use during the Commonwealth era and perhaps later.

† I have no MS. authority for the remainder of Book III.

‡ In Spain the title of 'almirante' is said to have been used for the first time in 1247 when Don Fernando III., King of Castile and Leon, gave it to Ramon Bonifaz, the commander of the force destined to recover Seville from the Moors. Bonifaz is also styled 'Admiral of Castile.' The ships he commanded were built in the Cantabrian ports and brought round to the south; the squadron is supposed to have been the first which flew the flag of Castile at sea (*Diccionario Enc. Hisp.-Americano*, Barcelona, 1887; Fernandez Duro, *La Marina de Castilla*, p. 29). As Admiral of Castile certain duties were assigned to Bonifaz and certain privileges conferred upon him, but, with the exception of the right of military command at sea, they bore no resemblance to those exercised by the English Lord Admiral and there is no likelihood that the Spanish post had any influence in the constitution of the English one. For France see *ante*, iii. p. 423.

Upon what Occasion Ships should salute Castles, or one another, at Sea, with their Ordnance; and how the Abuse thereof may be taken away.

I AM sorry I have the occasion to complain of the lavish and wasteful expense of powder in saluting ships under a friendly pretence of meeting at sea, more practised of late by our nation than by any other, though no people or country have more cause to prohibit it than we, when we remember our opportunity lost against the invincible Armada of Spain, as they termed themselves, in 1588, and only through the want of powder as is well known. And yet I must say in the praise of those of the Queen's time that the want of powder proceeded not out of a wasteful and idle consuming of it before there were cause to use it, for neither then, nor in all the reign of Queen Elizabeth, there was spent in a lavish kind the tenth part of that which is nowadays. I may impute it to many causes, as namely, our wars then that made our commanders more provident; but principally I must commend the moderate drinking of that time, which I could wish a reformation of now amongst us and that we may return to our old fashion, how odious soever it be to this new-fashioned time.*

What I shall say is not to make a comparison of times, or to tax our late abuses in that kind. I only advise, and ground my opinion upon

* Cf. *ante*, ii. p. 250.

reason, how things of this nature may be carried, which I refer to consideration ; and desire that, if it be approved, every captain may be tied to observe it as a law established, and a penalty to the breakers of it. And the first thing I will handle shall be the salutations of castles to ships, and the compliments of ships to castles. A castle, and the governor of it, is in the nature of a gentleman that will entertain his friend at his house and give him a hearty welcome. And because a castle cannot perform it in words he makes his ordnance speak it for him, with such a number of pieces as he thinks fit ; after which proportion an Admiral is to answer by way of thanks, but to exceed the number of the castle's salutation because an Admiral's ship commonly carries three times more pieces than a castle has. This is to be referred to the will of the commander on either side. If an Admiral be accompanied by his Vice-Admiral, Rear-Admiral, and the rest of his fleet, there needs no other salutation from the castle, for the Lord Admiral's welcome includes all the rest of his friends and fleet. But, notwithstanding, a Vice-Admiral must salute a castle with two pieces less than the Admiral, and the Rear-Admiral with two less than he ; and this is as much to honour the Admiral as the castle. But it must be considered, that these three only that carry the flags of command, and rule over the squadrons, and no other ship, is to shoot unless it is by directions of the Admiral ; for their shooting will be taken as too great a familiarity with him.

When an Admiral shall depart from under the command of a castle, in sign of his loving acceptance for his entertainment both he and his two other flags are to give the same salutation that the castle gave him at his entrance, and with the same

number of ordnance and form as aforesaid. If a fleet pass within sight of a castle, and not within command of his ordnance to reach him, the castle is not bound to salute, only to afford a welcome and a visit by a gentleman of quality.

If a governor fail to perform any compliment that is meet he must amend it upon the Admiral's landing, making his ordnance roar aloud his welcome. But the ship is not to answer, because it is done to the person of the Admiral who is bound to requite the same upon the governor's visiting him on board his ship and at his departure from thence.*

The saluting of ships by one another at sea is both ancient and decent, though in this latter time much abused. For whereas three, five, or seven pieces have been the ordinary use for a ship to salute an Admiral, and never to exceed that proportion, and an Admiral not to answer with

* The governors of forts, most of which during the reign of Charles I. would have been silenced by a couple of broadsides, were very sensitive on the subject of salutes and required them from men-of-war. In 1631, Sir John Penington complained that Pendennis Castle fired at him every time he went in and out of Falmouth harbour because he did not strike his flag. But the gunnery was so bad that it was really a harmless exercise. However, Penington, himself, expended 966 lbs. of powder and a corresponding number of shot (salutes were always fired with shotted guns) during one cruise in 1633. In 1629 the governor of Landguard threatened to sink Captain Richard Plumleigh on his refusal to strike his flag without an order from the Admiralty or Privy Council. Plumleigh replied that he would 'beat the paper fort to pieces' and it appears that he and the governor did actually come to hostilities (*S. P. Dom. Chas. I.* cxlvii. 18). As late as 1715 sixty-one masters of merchantmen using Harwich harbour sent in a petition complaining of the action of the then governor of Landguard in firing upon them, if they neglected the salute, and making them pay for the powder and shot thus expended.

above one or three, now they strive to exceed that number, thinking that many pieces add honour to the salutation, but the owners of merchant ships would be gladder it might be done with less cost and more courtesy in another kind. But though the Admiral cannot restrain this compliment in the ship that salutes, yet he may command his gunner not to return above one or three pieces, according to the old manner. And for such ships as are of his own fleet, he may prohibit the saluting of one another but upon the occasions following, *viz.* in bringing good and fortunate news against an enemy or after an escape of a desperate danger, and then not to exceed three or five, and to be answered at the discretion of the Admiral.

The excessive banqueting on board is a great consuming of powder; for as men's brains are heated with wine, so they heat their ordnance with ostentation and professed kindness at that instant, and many times not without danger. And therefore, to take away the cause a captain should have directions from under the hand of a General to forbid shooting, which would be a good excuse and give his guests satisfaction, unless it be done in the manner following as I have devised.

The vain drinking of healths is another means to waste powder which a General must likewise forbid, except it be the health of a free prince, or men of that rank and condition; and then not to exceed one piece when the health shall be begun. The King's, the Queen's, or their issues, is exempted from this strictness.

Upon some occasions an Admiral may command his whole fleet to fire their guns, as namely, when a foreign prince, governors of countries, ambassadors of great potentates, and men of great blood and

quality, shall be either transported or make a visit on board the Admiral to behold the stateliness of his fleet, it were necessary they were as well resolved of their force as the report they would make of their welcome. And in that case every ship of the fleet is to shoot their whole number of pieces distinctly and orderly, as thus : An Admiral and his squadron first to begin, the Vice-Admiral to follow his example, and so the Rear-Admiral to do the like ; but with this caution :—that no small ship or pinnace do mingle themselves with great ships, but to second one another according to their ranks and greatness.

To come now to my proposition how things should be carried, it is thus :—that upon drinking of healths, or leaves taken on board ships, instead of the excessive charge of burning powder out of great ordnance it may be done with muskets, for a man's welcome consists not so much in the difference betwixt a cannon and a lesser piece as in the loving heart of him that invites. Both the one and the other are consumed in the twinkling of an eye ; and the report of a falconet, when there is no greater piece, is all one, to the hearer, as if it were a cannon or falcon. Therefore to accommodate this difference, and to bring it to a certain custom in the King's ships hereafter, I wish that instead of the chargeable wasting of powder that is now in use by shooting of great ordnance, to have a number of musketeers placed, and decently armed and apparelled, soldier-like, upon the upper deck, that when there shall be occasion to drink healths, or to take their leaves at departure, they fire their muskets at a mark, made like the shape of a man put into a barrel off at sea within point blank, where the soldiers shall take their aim duly. This will be an act of more pleasure and delight

to the beholders than the other, where nothing is expected but the falling of a bullet, having no object to shoot at ; the eye, the ear, and sense are all in action, and employed together, and many other benefits arise by it. The soldier will by this practice be made a perfect shotsman against he shall encounter his enemy, and with so small a cost and charge that a cartridge of a cannon will entertain persons of good rank, and give them as great satisfaction with those few muskets as the number of cannons will do. For the ear is only pleased with the report a cannon makes which lasts no longer than a flash of powder : no gunner is made more perfect in his art, for he shoots at random in the air, without level.*

* Monson wrote with knowledge, for in Lindsey's fleet of 1635, of which he was Vice-Admiral, 358 barrels and 49 lbs. of powder were used. Presumably these were budge barrels, each containing 100 lbs., and therefore amounting to 16 tons (*S. P. Dom. Chas. I.* ccci. 50). With each charge of powder went a shot at about 14*l.* a ton. As there was no fighting it must all—at least all that was not stolen—have gone in salutes.

The corrupt Abuses used in his Majesty's Service by Sea, and the Means how to Reform them.

THE difference of times has made so great a difference in our sea actions, betwixt the days of Queen Elizabeth and those of this time, that I, who have been an actor in both, have cause not only to marvel, but to lament, to see abuses thus corruptly crept in. The particulars of some I will handle, and withal give instructions how to amend the errors committed in our services at sea, which will now much concern us because our bordering neighbours, the French and Hollanders, daily increase in shipping as we daily see by proof.

I will begin with the prime officer, who is the light and guide of the rest, *viz.* the Lord High Admiral of England, who is the main tree, and all other inferior officers are but branches that spread out of him. And where inferior offices are executed by many commissioners, and those not of greatest experience, and every one has his vote, sometimes they are carried by persuasion of friends, or wrought upon by servants, but commonly corruption has the upper hand by money to prefer men without merit. For I am informed that no place is freely disposed of without the gross feeing of some, not otherwise approving their sufficiences.

The most inferior officer of the ordinary in harbour is the cook, whose experience, whose long continuance in his Majesty's service, or testimony

of his sufficience under the hands of the ablest officers, cannot advance him to the place of a cook if prayers of angels do not prevail above the prayers of men. And though the meanness of this place is not to be rated with the rest of better degree, yet it will serve for an instance to shew how things are carried with bribery and corruption, to the prejudice of the King's service; for it is an old saying, 'He that buys dear must sell dear, or save himself by deceit.' But this is not all, nor yet the worst, that may ensue upon this bought place. For I find no man excepted from purchasing, but every one must stretch up for the price demanded for it, which makes the poor buyer confess it is the dearest bargain a man can lay his money out on.*

Here is a brave opportunity offered for an enemy, or any other ill-disposed person, to buy this place, who may be the destruction of the ship, and all other ships that ride near her, by setting the cook-room on fire and excusing it as an unlucky accident or mischance; for to the cook is only committed the fire in the cook-room. And because I make this cook's office the leading card to the rest, I heartily wish and pray, for the good of his Majesty's service, that the cook-seller and the cook-buyer, yet though he were a cook by name,† may be all hanged together, for example, fear, and terror of others.

* The commission of inquiry of 1608–9 brought out the fact that the sale and purchase of inferior places commenced after the death of Hawkyns, and the consequent relaxation of the stern control hitherto exercised over the civil administration.

† Apparently directed at Sir John Coke—pronounced Cook—who was no relative of the Lord Chief Justice, but the name must have had unpleasant associations for Monson. Coke, a Secretary of State and a Commissioner of the Admiralty,

The next abuse to this is the Officers of his Majesty's Navy, who of late years have been gentlemen inexperienced ; and the clerks, formerly belonging to the Officers, that are well practised how to pretend profit for the King and themselves to reap the benefit of it. These clerks guide the inexperienced gentlemen, who are often ignorant of their frauds, as will appear if his Majesty please to grant his commission to examine abuses, and to settle a form of government in sea affairs.

The first abuse and corruption that entered into this office, was in the time of the late Earl of Nottingham, Lord High Admiral of England, by placing a follower of his own,* who, by the power he had with the good old Lord, became the sole manager and director of things by sea and made his own will my Lord's peremptory command, and so the Officers of that time have confessed to me. And since that party's quitting his office it were good to know how other Officers are come into their places, and the value they gave for them. For I know there has been paid, and it is commonly rated at 1500*l.* for such an office, when, if you deal fairly, it scarce affords the interest of 1500*l.*

Leaving these abuses, which will prove without end if examined by the commissioners aforesaid, I will now apply myself to redress these encroach-

had been intimately associated with the Navy since the time of Sir Fulke Greville's Treasurership (1598-1604), when the administrative degeneration commenced. Dr. Gardiner describes Coke as ' a mere tool ' in his public life ; I know of no written evidence that he sold places, but that he should have done so would have been in consonance with his training and his *milieu.*

* Sir Robert Mansell. By ' Officers,' Monson means the four Principal Officers of the Navy. Nottingham died 14th December 1624.

ing dangers and corrupt dealings, and bring it to the state of Hawkyns's and Borough's times, who were perfect and honest men in their places, the one Treasurer, the other Comptroller.

* The way to settle things is to appoint an Admiral, young, heroical, and of a great blood. His experience in sea affairs is not so much to be required at first as his sincerity, honour, and wisdom; for his daily practice in his office, with conference of able and experienced men, will quickly instruct him. The next reformation will consist in the election of the four Officers of his Majesty's Navy formerly treated of. Whosoever shall execute those places, and not have passed the degrees of inferior officers, as boatswain, gunner, carpenter, *&c.* but are led most by the precedent or direction of the covetous and deceitful clerks aforesaid, his Majesty shall never be well served, but his name used for a colour to their deceits as appears by an instance I was an eye-witness to.

At my Lord of Lindsey's return from the west country to the Downs, there to revictual for two months, it was no sooner known to the Officers of the Navy, but twelve of their servants posted thither to take a muster of our men when a muster-master is allowed for that service. I desire to know what the King gained by that needless employment, and what every one of those clerks was allowed for his pleasure in riding and wastefully banqueting in that journey? This strictness is without cause; for it is impossible for a captain

* Marginal note in the Churchill text:—'This was writ before my Lord Northumberland was Lord Admiral.' Northumberland only held an acting appointment during the minority of James, Duke of York, who had been 'declared' Lord High Admiral for life by the King at a Council meeting of 18th March 1638.

deceitfully to carry a dead pay unless a purser connive at it, which is unlikely he would hazard his estate and reputation for twenty shillings. Therefore, let the Officers of the Navy pretend what they list, I know they do his Majesty a disservice in it, for by this occasion, and the badness of victuals, it makes seamen backward to serve the King. It is supposed the Officers have some deceit in it for their own benefit, in taking a time of advantage by men's absence that they know had fed upon stinking victuals at sea and would be glad of some refreshing ashore. These, and other like ill usages of the Officers, makes seamen disobey his Majesty's proclamation and fly to the service of other princes and States, or become pirates with hearts of revenge for the injuries done them.

And, to end this voyage, I will say something to parallel this muster. At my return from Portsmouth in the company of Captain Mason, who had been treasurer of the late great warlike action of his Majesty's, it was our hap to meet with thirteen clerks and officers of the Navy, some of them stuffed in hired coaches with four horses, the rest well mounted on horseback, all of them to pay but two ships of the King's, the James and the Reformation, which, I think, will not amount to much more than one thousand pounds. I desire there may be a quære of their charge to his Majesty by this journey of theirs, and it shall appear what devices they have to enrich themselves and followers when Captain Mason at that time told me that in paying his Majesty's great armies, though part of them were as far as Cornwall, yet he never charged his Majesty in all those services with more than himself, his clerk, and one other ordinary servant.

As this was the end of that voyage so I will

not let pass what happened in the beginning of it in the James I served in. At the taking in of victuals at Tilbury Hope there appeared a certain proportion of beef and pork, able, with its scent, to have poisoned the whole company, but by the carefulness of the quartermasters it was found unserviceable. Yet after it was refused by the said officers of the ship, and lay upon the hatches unstowed, some of the Officers of the Navy repaired aboard and, by their authority and great anger, forced it to be taken in for good victuals; which proved as I have said before. My observation to this point is that, though the Officers of the Navy have nothing to do with the victualling part, yet it is likely there is a combination betwixt the one and the other, like to a mayor of a corporation, a baker, who for that year will favour the brewer that shall the next year do the like to his trade when he becomes mayor.

Here will I cease to make any further discovery of the abuses but refer it all to examination, and myself will turn physician and study how to cure the malignant diseases of corruption that have crept in and infected his Majesty's whole Navy and his employments at sea, as well in the Officers that assume absolute authority above the rest, and who, I think, will be found most faulty, as in the Victualler, and purser, that has relation to the Victualler. My third observation is the state of the King's ships, their build, and what is to be amended in them. My fourth is the fore-mast men, gunners, and all the company in general, without whom ships cannot sail. And my last shall consist of the masters and captains, which I will make the voyage of 1635 the ground of my exceptions to them.

As I have spoken of my Lord Admiral, by his

authority to be the chief reformer aforesaid, so, in the second degree of reformation, I wish that such Officers of the Navy were chosen as are perfect in their occupation and breeding, and have passed all offices and degrees in ships, and namely, out of the fraternity of the Trinity House; for they are men that know well the practice of the sea, being brought up in it from their infancies. They served their apprenticeships in ships, which no gentleman or clerk has done; by their painful labour they have attained to good estates; they are of that sufficient ability as they have the election of the masters that serve in the King's ships; their ambition will not extend higher than to his Majesty's countenance, and to be honoured with the title of his servants; in their employments they will not strive to exceed in ostentation, nor in numbers of needless servants and followers; their diet will be answerable to their accustomed breedings; they will not covet state in their lodgings, nor solemn places in their consultations;* they will commend no man to office whose sufficience they will not undertake for; no provision or store can be brought in but they will be able to judge of the goodness of it; no boatswain, gunner, or other officer, can exceed in their demands but they can control them; or, in their return from their voyages, bring in wasteful expense but they will be able to check them, though it be to a yard of cable, rope, or a pound of powder. This is the way, and no other way, to prevent stealth, cozenage, and all deceits, which the clerks cannot devise to do. Thus would the name of corruption and abuses be converted into merit and desert. If these men shall offend in

* The offices in Mincing Lane were hired for the meetings of the Principal Officers in 1630.

the execution of their offices they are not people that can carry their deceits out by friends, as not being bred that way; or, if they shall be found culpable or faulty, their estates are not so mean but will be able to make restitution for the damages they do.

But to take away all occasion of deceit in the inferior officers of the ships, when they are at sea, these Officers of the Navy may appoint in every ship an able man, who, besides his labour, may have authority to overlook the expense of the gunner, carpenter, boatswain, and the rest, and to approve it under his hand with theirs, and with the testimony of the captain and master. And because these men may have the better respect above the common sort, and profit withal to make them the more careful to perform the trust that is committed to them, they may be entered for drum and fife, which will add six shillings a month to their ordinary entertainment; for the two places are to be well spared as unnecessary in sea service.

* The next officer or office I will handle shall be the Victualler, whose negligence or covetousness, for one of the two it must be imputed unto, has brought the King's service to a great contempt, as all men know with grief and pity. This Officer ought to have a bitter and severe censure if he fail of the goodness and quantity of victuals of his Majesty's allowance, and I wish no less than death

* Marginal note in the Churchill text:—'This was writ before the Victualler came into his place.' *I.e.* before the appointment of John Crane, chief clerk of the royal kitchen, by a Patent of 28th November 1635. For some years before Crane's appointment the victualling had been carried on, by the executrix of the previous holder, under the orders of the Treasurer of the Navy.

to be inflicted on him. For no subject's estate is able to countervail the damage his Majesty may sustain in such defects in his weighty expeditions. The combinations, the abuses, and the practice of this office, I refer to future examination.

The victuals at sea consists of beer, bread, flesh, fish, butter, cheese, *&c.* and to be bought of several persons, according to their professions and trades. I will therefore put them all in one number and set down a course how to reform them all together, *viz.* to bind every one in a particular bond, returnable into the Exchequer, that the victuals they furnish shall be sufficient, well-conditioned, able to abide good the length of the voyage consisting of so many months. And if there be found defect or fault of performance thereof the bond to be immediately forfeited, unless by a day appointed they put on board his Majesty's ships the quantity of such victuals as shall be defective; by this means the King shall be well served and the people well satisfied. Moreover the Victualler must be enjoined to put on board every ship the whole proportion of victuals to the quantity of men serving in her, for in this there has been great deceit. For whereas his Majesty allows a large and sufficient rate for every man's diet, the Victualler and the purser had wont to contract betwixt themselves that the purser shall have the victualling of a certain proportion of men, and to allow the Victualler three half-pence or twopence *per diem*, out of that the King allows and justly pays.

The gain of the purser at sea far exceeds all other officers, as will appear when their buying their places shall be examined. Both the buyer and seller of this office know that the gain of it must arise by deceiving the King and company.

Which, besides that it breeds a great inconvenience, for the purser's unreasonable griping the sailors of their victuals and plucking it, as it were, out of their bellies, it makes them become weak, sick, and feeble, and then follows an infection and inability to do their labour, or else uproars, mutinies, and disorders ensue among the company, that a captain must interpose himself, his reputation, and credit to appease them; and all for the corruption of the buyer and seller of that office. Besides it gives a great discontent to people, and discourages them to do service in the whole voyage. For reformation hereof, this place is not corruptly to be bought with money, but free election to be made of an honest and careful man that will have no end but his Majesty's profit and his own credit. He must neither contract with the Victualler, nor take advantage of poor men being ashore for him to save their allowance of diet to enrich himself, but such surplus of victuals as remains at the end of the voyage, to see it forthcoming, or to be accountable for it to the King's officers. And if it be found, after the voyage, that this purser has performed the trust committed to his charge, then to reward him according to his service as the Lord Admiral and the Officers of the Navy shall think fit. This, considered, will prove more beneficial and more safe to the purser than to buy his office at a dear rate which he must execute with danger. For his gain must rise by cozenage, which being discovered, a heavy punishment will be inflicted on him.

This false benefit thus gotten by the officers conniving with one another, by this reformation will turn to the King's profit. But I desire it may be carried with more moderation and pity

to poor men. For the company have always been the sufferers, the pursers making their advantage of the men being ashore by taking to themselves their allowance of victuals in their absence.

The second abuse that is offered the company is in another kind, as namely, in their pay, wherein his Majesty is no less abused than the poor men. For, if at any time they fall sick and be put ashore, such is the charity of people where they land that they sooner perish than find pity unless they bring money with them. And seeing that his Majesty does and must pay all those that serve him it will be better for them, and more profit to the King, to discharge them at their first arrival than to continue them longer unpaid. For whilst they lie sick ashore, and not discharged, their victuals and pay amount to thirty and odd shillings a month, which may be saved if they are at first discharged.

In the voyage of 1635 some of my men fell sick in the James, whom I caused to be put ashore to avoid further infection, and commanded the purser to make provision for their lodgings and other necessaries, to be abated in their pay. If these men had been discharged when they were landed, the King had saved so much as I have expressed before, and the poor men had been furnished with money to have defrayed their expense, which they took upon trust. I confess this abuse is ancient, which I complained of to Queen Elizabeth, who redressed it by sending an under-treasurer and moneys with me to sea in the last voyage she lived, and wherein I went Admiral, but her present death following caused it to be neglected, though fit again to be revived for the good both of King and subject. When the purser of the James demanded his money thus disbursed,

the Officers of the Navy with great anger asked him who made him the King's treasurer? Which is a direct proof they have a further end in it than the King's good; for I am told they have two shillings in the pound for the payment of such moneys as the poor sailors go upon the score.

I will proceed, and speak somewhat of the King's ships, their manner of build, and their defects, which, in my opinion, ought to be amended. I will make the James my precedent, which is a beautiful ship to the eye, and of mighty force to offend. I found nothing amiss in her hull, but in her masts, yards, and bolt-sprit, which were too short, which made her sails too narrow, and her sail the worse. But these are faults that may be easily amended.

But in some cases of building ships, or rather, I may say, of making experiment, they have left no help or hope of amendment; though I am informed there was a warning given of the insufficience of the workman before he undertook her.

In my speaking of the difference in the build of ships, betwixt a flush deck and high-charged, I have said sufficiently before. Only I advise that in ships with flush decks a slight forecastle may be built, and the uppermost part of the ship be armed with junks of cables for the safeguard of men against small-shot; as also to make barricadoes, and other material defences, to place several fowlers afore and abaft to be the death of so many men as shall enter. There are many other devised things to be practised, which I refer to my Fifth Book, wherein I treat of stratagems.

Now I will speak of foremast men, and the abuse used in pressing them, by example of this last voyage in 1635. The greatest part of these men consist of watermen, never before at sea,

and others of the same sort altogether unserviceable. And herein are the Officers of the Navy to blame, who, to pleasure friends or for other ends of their own, appoint tailors, porters, and others of that rank, unworthy of the hatches to lie on; and yet every one of these men stands his Majesty in 1*l.* 11*s.* a month, when they will think much to pay an able seaman that shall be absent at a muster. So great a power has partiality with these men that they prefer the unworthy before the well-deserving, and are willing to pay 1*l.* 11*s.* a month to tailors, rather than 14*s.* to a sailor.* The

* The Principal Officers were responsible for many discreditable incidents in naval affairs, but it was certainly not their fault that tailors, and such like, were pressed instead of seamen. They could only refuse to enter such men when they appeared; to have taken such a course, and to have faced the almost certain troubles that would have followed, required men of stronger minds, sterner conscience, and more unyielding temper than those who served Charles I. There is also the fact that we see the seventeenth century administration under the illumination of a full publication of official papers, and are enlightened by the venomous criticism of those who thought they could do better or who yearned for the loaves and fishes for themselves. Pecuniary dishonesty may have been more widespread in this century than in the eighteenth, when it became systematized and almost official; it was spread over a larger surface, and therefore shows out more prominently, but it is doubtful whether the illicit gains of the whole Navy during all the reign of Charles I. were equal to those of one war year of the next century. It may be questioned, also, whether the naval administration of that time was in truth more inefficient than that of some of our own public offices, *e.g.* than of the War Office of to-day, tried in the Boer War. I know of no utterance of any public man of the seventeenth century as intellectually feeble as Lord Lansdowne's defence of himself as Secretary of State for War (cf. *ante*, ii. p. 251, note).

On the other hand it is well to remember that for three centuries and at its worst, whether that worst was to be found in the seventeenth or eighteenth centuries, English naval

sea towns in England are not far behind these abuses in election of such men as I have found in this voyage. In the northern press, betwixt Yarmouth and Newcastle, never a man appeared in the James that ever had been at sea ; insomuch that if I had not procured a warrant for one of my master's mates to look out for good men never ship had been worse provided.

For reformation whereof I would advise at the next general press that the charge be committed to the masters, or their mates, that go in the voyage. They are to repair to the towns and corporations on the coasts, authorizing them, with the officers of the said towns, to call all seafaring men there dwelling before them, and the masters to examine their sufficiences, and according to their abilities to press them and enjoin them to appear before the clerk of the checque at Chatham.

administration was always superior to that of our chief competitors and antagonists—Spain, Holland and France. Sometimes it was very much superior. There is no common measure which would enable the historian to express in terms of fighting efficiency at the point of contact the superiority of administration here; and inferiority abroad, which again and again made the enemy late in mobilization and arrival at the strategic objective or forced him to quit the strategic area, and was the unnoticed but all-important foundation on which the Admirals built their plans and their victories. The successes of Drake in 1587 and of Nelson in 1805, with the long intervening roll of triumphs, were won, primarily, in London and the dockyards. Henry VIII. gave England the supreme advantage of a compact and effective organization, which for long had no rival ; an advantage which was retained as against France until Napoleon came into power, and as against other countries, generally, until the recent outburst of maritime rivalry among the nations, and which, through an average of years, was always better than the organization of our antagonists. That our administration, judged by the standard of great commercial undertakings, was very bad does not affect its relative international excellence.

There is another great mismanagement in his Majesty's ships, which is fit to be amended in order hereafter to redress it. By allowance of the King, the worst of those loiterers I have spoken of have as good entertainment as the ablest sailor that is no officer, and neither captain nor other commander can reform it because custom has so settled it. For a reformation whereof I do advise that by consent of captain, master, and gunner, every such man's pay be proportioned according to their sufficience, *viz.* to take it from one and add it to another; but no way to charge the King more than with his ordinary proportion. If this course were really taken seamen would be as willing to serve the King as they are now refractory to his service; it would be a great cause to make them to obey and love their commanders, and encourage them to exceed one another in their labours in hope to have their pay mended. These people are to be governed by a captain, master, and other inferior officers, which I have formerly treated of; and I will now describe the fitness of a captain to be chosen to serve in the King's ships.

The little employment in sea affairs makes many pretenders to the place of captain when there is talk of an expedition; and very often there are factions and quarrels among such pretenders. But to take away all competition that may arise amongst them, and that his Majesty may distinguish of their works, it were good, when such captains shall be nominated and elected, to require them to present authentic testimonies of their service and fights they have been in at sea, which will approve their abilities; for a captain is chosen for his warlike part, as the master is for the conduction of his ship.

A captain of a King's ship must be of reputation and government, bountiful but not prodigal in his expense. He must moderate his expense according to his pay and the time it is likely to continue, that he may be the better able to maintain his port after the service is ended, both for the honour of the King whom he serves and for his own reputation; for his after-preferment must lie upon his former behaviour and demeanour. He must abandon the beastliness of drinking and conniving at drunkards, which are the general disorders at sea, though in reason no man should more detest it, for they may know that drinking is not the way to preferment. For no man was ever raised for his vice, but it is made an objection to hinder his fortune. As a captain ought to be frugal in his own expense, so ought he to be no less for the King's profit, as, first, in victuals. There must be no conniving betwixt him and his purser, nor betwixt the purser and any other officer; and what victuals soever shall come into the ship that it be not embezzled or secretly conveyed out of her. He must see an equal carriage betwixt purser and company, without advantage to either, for by this reformation the King is only to receive benefit. He must also have an eye over the gunner, as well to see the taking in of his store as the re-delivery of it. He may have a servant to keep a private account of the expense of every shot at sea, to disprove any unlawful account the gunner shall unjustly charge himself withal.

I will end this discourse with the masters, who are the conductors of his Majesty's ships from their going out till their return home. There ought to be a general election of these men, principally of such as have been practised and

served in the King's ships; for an experienced commander is more to be required in that case than a skilful mariner. The masters that were employed in this last voyage of 1635 are all able men in the art of navigation, which they profess, and of a sufficience to take upon them the conduction of a merchant ship to any place or port wheresoever they shall trade. But for the service in the Narrow Seas, where they have not been accustomed, or for managing the King's ships, in which they have not been used for want of experience, they are much to seek as will appear by what follows.

I confess that since I served in the Narrow Seas I find so great a difference betwixt the masters of that time and this that I may compare it to an ancient art, that in long continuance of time has been forgotten and lost for want of practice and use. The masters in those days were either ignorantly adventurous, or in this time providently cautious, which I may rather term over timorous. For we then little valued those adventures, which now we properly call dangers, though I am assured the perils be alike and not to be accounted hazards. But I impute the true cause of security in the masters to that they have no other ambition but to carry out and bring home the ship under their charge, and to receive their salary for it. I confess they are the more excusable because their breeding has not been to sail amongst sands, or in seas so narrow that which way soever they turn themselves they behold land on all sides of them, which are subject to the change and shift of several winds in every port. For that wind which is secure upon one shore is death upon another; and tides that sometimes are advantageous to them, at other times may prove dangerous.

This reformation cannot be in the masters themselves to amend for it requires long experience and labour to make them perfect in our seas where the service depends. And, where they are strangers in the navigation, this defect must be supplied with expert and skilful pilots that make the Narrow Seas their daily trade and practic The King's ships being thus provided they have little cause to fear danger of wind or storms, but only fogs, that take away the sight of the land from them, which come not often nor continue long upon our coast. And in that case of dark and misty weather never ships of the Kings of England were better fitted with ground tackle, or whole shots of cables,* that they may ride in the midst of the Channel. But whensoever the fog shall vanish, and the land appear, though it were in any part of the seas betwixt the North Foreland in Kent and the Dodman in Cornwall, they will be able in few hours to harbour themselves, howsoever the wind proves that may endanger them; and therefore, in my opinion, that which is called care in some may be rather termed fear in them. These masters that I term raw in the King's ships, not being used to the government of them, it is fit they be put into the right way by the boatswain, who is best able to instruct them. Though in these latter times, when ignorance has prevailed against knowledge, the boatswains, by a strict decree of the Officers of the Navy, are prohibited from taking charge of the King's ships as masters; but the inconvenience of this law of theirs I desire to argue with our late reformers.

Another oversight and error in these masters, I find, is that they cannot distinguish betwixt the

* A 'shot of cable' consisted of two cables spliced together.

discipline of the King's service and their accustomed sailing and working in merchant ships. For, though in their Instructions in this voyage they were commanded to keep a good distance off one another at their coming to an anchor, such have been the masters' carelessness to observe this order that they have pressed to be at an anchor as soon, or as near the Admiral as they could, neither giving place nor room to the Vice-Admiral or other ships of greater charge or burthen than themselves. Let this be a caution to succeeding times upon the like occasion that wheresoever a fleet shall anchor, either at sea, harbour, or road, they suffer the three flags first to anchor, who must be careful to take a good berth from one another, which done, every ship, as they are divided in squadrons, is to anchor a convenient distance from the Admiral of its squadron, and to take place according to the draught of the ships and the depth of the water they anchor in.

A master must moreover observe, after his coming to an anchor, to examine the defects of his ships and to take order for the present amendment of them. Thirdly, he must have his boats ready to fetch water, wood, and ballast, that the want of them be no cause of his stay in harbour if he be suddenly commanded to sea. Or, if his abode be longer than he looked for, then to send his men by turns to walk in the fields on shore, some one day and some another, to take the air and exercise themselves for their healths. This will give great satisfaction, and be a refreshing to them and the ships, when people shall be absent and the ship made clean and sweet. Fourthly, a master is, at his first arrival in a port or road, to let fall a single cable and anchor,

unless the weather force him to moor with two, which if he do, yet as he shall see an appearance of fair weather then to weigh one of his two that he may be ready to set sail if he be commanded. For a man of war is like a post, that has horse continually saddled for the King's service.

Many of these abuses I confess began to creep in, like rust into iron, at the latter end of Queen Elizabeth's reign, by the unableness of some Officers of the Navy that then had the charge of them; who did, as some nowadays do, presume to order and dispose of all things of the sea though they were never twenty leagues from the coast. As great presumption as for a bred seaman to take upon him the office of a judge in temporal or spiritual affairs.*

* These strictures are of a very different character to the commonplace criticisms contained in the paper actually sent in after the voyage of 1635 (*ante*, iii. pp. 380–4). It is very certain that the foregoing section was never circulated until the monarchy was tottering; probably it was never circulated at all.

It may have been noticed that, in his numerous comments on the theft and embezzlement of naval stores, Monson never alludes to their identification by a mark, *e.g.* the Broad Arrow, so that they could be traced and the receivers prosecuted. The Broad Arrow was not employed by the naval administration in his time although it was certainly in use in one or more departments of the service of the Crown. Certain inquirers have attributed to it a fabulous antiquity—even supposing it to have been, in origin, a pre-historic phallic emblem—but the earliest authentic reference known to me is of 1386, when a man was pilloried for pretending to be a King's officer, and in that capacity going to brewers and marking barrels of ale with a mark called 'arewehede,' saying that they were for the royal household (Riley, *Memorials of London*, p. 489). The next instance, of 1574, is also connected with the royal service when there was payment for 'marking of oaks with the Broad Arrow in Westwood' (*P.O. Decl. Accts.*, 2210). This timber was for the Navy, but it seems likely

that the Arrow was only used to indicate what trees were to be felled and not to prevent the theft of those cut down; the trunk of an oak would not be a convenient thing to steal. The Broad Arrow is sometimes seen on ordnance of the time of Henry VIII., but in these guns it may have been incised later, although it is extremely probable that the mark was used by the Office of Ordnance (who also required much timber) from a much earlier date. John Hollond (*Discourse of the Navy*, N.R.S.) dilates, about 1659, on the utility of a mark for government stores, but it was only usual, at that date, for the anchor-smith to incise his initials on the shanks of anchors. However, the administration of the Restoration adopted Hollond's, or some one else's, suggestion, and by a proclamation of 19th November 1661 it was directed that cordage and sails were to be worked in a particular way which would distinguish them from ordinary commercial products; all other stores were to be marked with the Broad Arrow, either by stamp or brand. In January 1664–5 an Order in Council directed that merchant ships, impressed as transports and victuallers, were to be marked with the Broad Arrow as owners were trying to evade the duty of serving the Crown. There are various Navy Board letters and warrants, during the remainder of the century, which shew that, either carelessly or wilfully—in the latter case for obvious reasons—the order to mark stores was very indifferently obeyed, and as late as 1693 it was found necessary to issue another proclamation, on 10th August, practically repeating that of 1661.

Of the Harbours of England, Scotland, Ireland, and Wales; the Nature of them; their Depths; and how they bear from one another.*

THE island of Scilly is from the Land's End of

* I am indebted to the courtesy of Commander F. O. Creagh-Osborne, of the Hydrographic Office of the Admiralty, for the information that about 1630 the variation of the compass was *nil*; one cannot therefore say whether the courses given here were intended to be true or simply magnetic. Variation was observed by Columbus and, by 1519, had been so far studied that it was allowed for by Magellan; all sixteenth century works on navigation, especially the Spanish ones, treat the subject as fully as the limited knowledge of the authors permitted. The discrepancies in the distances are probably due to the rough methods of calculation and observation in use, but the leagues are no doubt intended to contain three nautical miles. But the vague way in which the league was used among seamen, both in the royal and merchant services, and down to the nineteenth century, to denote English miles or the continental measure, seemingly according to the training or inclination of the individual, is well known to students, and a suggestion as to the cause may be hazarded by way of explanation. In the reign of Severus, the Celts of Gaul were permitted to use their own measure of distance, the *leuga* or *leuca* which was equal to a Roman mile and a half. The *leuca* was itself a Celtic word and, in Gaul, the name and length entirely replaced the Roman mile which fell out of use. When the Teutonic tribes overran the Empire they brought with them the *rasta*, or double *leuca*, but although the new itinerary measure took root the name did not and the double league was still called a *leuca*. When the Goths and Visigoths passed on into the Spanish peninsula, they took with them both the double

Cornwall eight leagues, E. N. E. This harbour of

league and its name, so that in central and western Europe the word was in general use and given a recognized position by its adoption into late Latin, although the exact distance included in it varied somewhat in different countries and sometimes in different provinces of the same country. English conquest and colonization, however, proceeded from a different stock; the *mile*, whether etymologically or as a distance, had no relationship with the *leuca*. But with the advent of the Normans, the consequent influx of, and contact with, continental customs, forms, and expressions, and the growth of a school of clerical annalists who wrote in Latin, an element of confusion was introduced seeing that, to describe the same measure, the mass of English clung to the vernacular *mile* while the monks, the lawyers, and the Crown officials used *leuca* in their histories and in legal and official writs and documents. This confusion was increased by the union of England with the northern provinces of France and with Aquitaine, when the commercial intercourse which followed brought English and French seamen into frequent communication, because the former had only their own *mile* to express the French *lieue*. A class always conservative in thought and practice, and who instinctively applied their own vocabulary to foreign expressions where possible, would accept naturally a looseness of description and definition which would tend to become customary. There are so many nautical words in existence derived from Norman French that the absence of any derivative of *lieue* shows that the mediæval English seaman used his own *mile* in French ports and in communications with French seamen, that *leuca* appertained to the small educated and scholarly class, and that we must look elsewhere to explain the adoption and common use of *league* in the English marine. Among the educated classes in the fifteenth century an Anglicised form of league, derived from the *leuca* of the writers, was in use, but even among them the distance it signified was a very uncertain one and varied from one to four miles ('after the manner of Lombardye they be called myles and in France leukes, and in Englond they be called mylis also.'—Caxton, *Game and Playe of Chesse*). When Spain and England were brought into close connection, at first friendly and then hostile, during the sixteenth century; when Henry VII. and Henry VIII. hired Spanish ships and crews for their navies, and when English commerce was

Scilly has twenty fathoms, and there are three goings-out of it.*

The next good harbour is Helford, little frequented: it has six or seven fathoms water.†

From the Lizard to Falmouth, N. and by E. four leagues: Falmouth is in an excellent harbour, and hath twelve, thirteen, or fourteen fathoms.

extended to Spanish ports, the seamen were especially affected by the need for using, in many ways, the Spanish measure of distance—the *leuga*. But the main fact was that all early English books on navigation were either translated from, or based on, Spanish ones, and therefore as ocean voyages became more frequent and the need for scientific knowledge greater, every man who learnt something of navigation helped the reception here of *league* in its new acceptation. Thus it became a maritime word of daily use, but by quite a different road from that by which it had reached the literary class. But the Spanish league itself varied considerably in the several kingdoms of the peninsula, and was further modified by the necessity for accommodating it to the fixed rules and figures of scientific navigation. Also allowance must be made for the fact that when taken up by the leading English seamen, and used by them with some approach to accuracy, it would be used more and more inexactly as it sank through lower strata of uneducated men. Eventually it seems almost to have ousted *mile* in logbooks, naval papers, seventeenth and eighteenth century books of travel and the like; but at sea, at any rate, it still remained an uncertain measure, mainly perhaps because for most of those who used it the word had been handed down by custom and tradition, from one generation of seamen to another, and meant for each individual only that which his education or mere hearsay had taught him to associate with it, sometimes a mile, and sometimes two or three miles.

A remarkable example of the loose way in which 'leagues' was used for 'miles' by the Churchill editor is noticed *post*, p. 346.

* There are five entrances to St. Mary's Road, the best anchorage in the Scillies, and the greatest depth, in shelter, is nine fathoms.

† Four fathoms.

From Falmouth to Dodman Point, E. and by N. four leagues.

From Dodman to Fowey, N. E. four leagues.

From Fowey to Ramehead six leagues, E. N. E.

Plymouth lies from hence, N. N. E. four leagues, and has four or five fathoms.*

From the Ramehead to the Start eight leagues, E. S. E. From the Start to Dartmouth three leagues, N. E. and has ten or twelve fathoms.

From Dartmouth to Torbay four leagues, N. E., a good road, at eight fathoms, for a south-west wind.

From Torbay to Portland thirteen leagues, E. and by N. and within that bay lies Exmouth and Lyme. Portland is a good road for a south and a south-west wind, at seven or eight fathoms.

Within Exmouth lieth Weymouth, a barred haven; and going from thence to the Needles in the Isle of Wight lies the harbour of Poole, where you shall have five fathoms at half flood.

From Portland to the Needles eleven leagues, E. and by N. From thence to St. Helen's seven leagues.

Within the harbour lies the haven of Lymington and Southampton, and within that water Hamble; and to the E. Portsmouth, an excellent harbour; and in the Isle of Wight, Newport and New Town.

From St. Helen's to Beachy sixteen leagues, E. N. E. Betwixt them lies Chichester, Arundel, Shoreham, and Newhaven, all bad harbours.

From Beachy to the Shingles,† E. N. E. eight leagues. Betwixt them lies Rye, a dry harbour.

From the Shingles to Dover nine leagues, N. E.

From Dover to the Downs, and so to the North

* This is Catwater, or rather off Catdown. Barn Pool and Hamoaze were very little used at this date.

† Dungeness.

Foreland, seven leagues ; there lies betwixt them Sandwich, a barred haven.

From the North Foreland to Orford Ness, leaving the island of Sheppey, and the course to London on the larboard side.

Harwich is the best harbour upon all that coast ; and, indeed, the best betwixt it and the Firth in Scotland.

From Orford Ness the coast lies, N. W. twenty nine leagues from FlamboroughHead. There lies betwixt them Solebay, Lowestoft, Yarmouth, Cromer, Blakeney, Burnham ; from thence to Boston, south-east, and to Lynn west, you pass many dangerous sands in going into these two places.

From Boston to Hull and Burlington, you must go N. and N. and by E.

From Flamborough Head to Scarborough six leagues N. W. from hence to Whitby five leagues.

From thence to Hartley Pool seven leagues, W. N. W. ; from Hartley Pool to Tynemouth, N. N. E. nine leagues, and so up to Newcastle.

From Tynemouth to Coquet Island, N. N. W. seven leagues. And thus much for the northern coast.

Now I will return into the other Parts of England and Wales.

From the island of Ramsey, or the north part of Wales,* lie the Bishop and the Clerks, rocks of great danger ; two leagues from thence lies the island of Grassholm.

From thence to Milford Haven three leagues, and the going in is N. E. one of the best harbours in the world ; it hath a rock in the middle of it at the entrance.

* *Sic;* should be south.

From Milford to St. Gore's Point * two leagues, and from thence to the Ness, † E. seventeen leagues; there lies betwixt them the island of Caldy, Tenby, and the point called Worms Head.

From the Ness to Steepholm, E. S. E. seven leagues; from thence to Bristol N. and by E. twelve leagues. There is betwixt the Ness and Bristol the islands of Barry and Scilly, ‡ Cardiff, Newport, and Chepstow; all barred havens.

Now to the English Shore.

From the Holmes § to Lundy, W. S. W. twenty leagues: there is betwixt them Helford Comb, || a narrow going in, but three or four fathoms within.

From thence to Bideford, S. S.W. seven leagues: it has two divisions; the one goes into Barnstaple, the other into Bideford; barred havens.

From thence to Lundy, N. N. W. five leagues. Here you may anchor on both the sides of the island at fourteen or fifteen fathoms.

From Lundy to the cape of Cornwall twenty eight leagues S. W., and from thence to the Land's End five leagues S.; there lies betwixt Lundy and the Land's End, Padstow, St. Ives, and some other creeks, all barred havens.

The Coast of Scotland, and of the Islands.

The island of Shetland is the place where the Hollanders begin their great fishing, in the harbour called Brassound, ¶ which is an excellent harbour, where all their busses meet, and begin their fishing the 23d of June. At the north point of the island,

* St Goven's Head. † Nash Point. ‡ Sully.
§ Steepholm and Flatholm.
|| Ilfracombe. Dry at low water.
¶ Bressa Sound.

there is a good harbour, called Blansound,* which you may sail through from one side of the harbour to the other.

There is another good harbour, called the Magnus † Haven, and an island where ships may go, and ride about it; and behind it a harbour called Hamborough Haven.‡

West from Scotland, and north from Ireland, there lie many islands, anciently called the Hebrides; in most of these islands there are excellent harbours.

The Lewis is the best of the islands; which the English have now planted, for convenience of fishing: it is in length twenty nine leagues S. S. W. and N. N. E.

The islands of Orkney are thirty-one in number.§

The island of Wayes ‖ lies N. N. E. from Catness ¶ in Scotland, and but five leagues from it. You may sail through these islands in many places by Catness, and S. from Sanday, and come out again.

From Catness upon the main land, and the promontory of Scotland to Buckerness,** twenty one leagues S. E.; betwixt them are many good harbours, Dermecke, Ross, and Lewerness.††

From Buckerness to Aberdeen, thirteen leagues S. S. W.; from thence to Mont Rosse,‡‡ S. W. and by S. four leagues; to Dundee S. and after S. S. W.

* Balta Sound.
† St. Magnus.
‡ Hammer's Voe.
§ Fifty-six.
‖ Hoy Walls, or Waes.
¶ Caithness.
** Buchan Ness.
†† Dornoch Frith, Cromarty, and Loch Ness.
‡‡ Montrose.

From Dundee to the isle of May, S. W. six leagues. From May to the Bass, and up to Leith, nine leagues.

From the Bass to the Tape Head,* W. six leagues; from the Tape Head to Berwick, S. S. E. five leagues.

The Harbours in Ireland.

The Black Rock,† and Cape Dursey, S. and by W. fifty three leagues; and between them the haven of Gallaway.‡

From Gallaway to the island of Arran, six leagues; from thence to Limerick, S. nine leagues.

From Gallaway to Blasques,§ S. S. W. sixteen leagues; from Blasques to Dunseys,‖ S. E. twenty one leagues.

From Cape Clear to the Old Head of Kinsale, E. and by N. twelve leagues.

From the Old Head to Cork, N. E. and by E. a great league.¶

From Cork to the east point of Waterford, E. N. E. twenty leagues. The whole southern coast lies E. N. E. and W. S. W. and betwixt Cork and Waterford lies Yochill,** E. N. E. from Cork, six leagues.

Five leagues from Yochill, E. lies Dungarvan, lying in N. N. W.

From Yochill to Waterford, E. N. E. twelve leagues; the haven of Waterford lies in N. and by W.

* St. Abb's Head.
† Blacksod Bay.
‡ Galway.
§ Blaskets.
‖ Qy. Dursey Head.
¶ The distance is more than twenty miles. The old German 'great league' was five miles.
** Youghal.

From Waterford to Washford,* the island of Saltres † lying in the way, you may go betwixt it and the main land east from Waterford; from Saltres to Washford five leagues.

From Washford to Wexford, N. and by W. five leagues.‡

From Wexford to Dublin, N. and W. five leagues.

Five leagues from Dublin lies the harbour of Drogheda.

From Drogheda to Dundalk seven leagues.

An Observation I gather of the State of the Harbours aforesaid, and the Advantage an Enemy may take of them to annoy us.

Of so many harbours that England affords, and towns seated upon them, as aforesaid, there are but these following of any importance to entertain ships of burthen, *viz.* on the south coast, Plymouth, Falmouth, Hamoaze lying within the island of St. Nicholas, Dartmouth, Portsmouth, and those within the Isle of Wight. To the northward, Harwich, Lynn and Humber: the two last are frequented most by ships of their own, full of danger and sands, little known to any others but to themselves. I will therefore say little of them.

* Wexford.

† Saltee.

‡ There is here some clerical or printer's mistake. Washford is undoubtedly Wexford; the latter occurs as Washford in several contemporary maps and books on navigation. The Dutch form was Westfoort, whence comes probably the English corruption. It looks as though this Washford-Wexford sentence—the same places—had been inserted, or left in, by mistake.

Over against the harbours on the south coast of England, France is seated, and, namely, Normandy and Picardy, which, we may thank God, does not afford so good a harbour upon all that coast as the worst of those I have named. Otherwise our forefathers had tasted the danger of them many ages before ours; and we in this time should find it a dangerous thing to have neighbourhood with good harbours now France labours to be great in shipping. The harbours of greatest consequence, and for us most to fear, are Brest and Blavet, forty and odd leagues asunder, and both of them to the eastward of Ushant, the head land of Brittany, which must be doubled before they can come into our Channel; and that easterly wind which brings them about Ushant, will be against the recovery of any harbour in England. Or if they think by their fleet to intercept our trades, or to have any other designs upon us, they will be brought betwixt Scylla and Charybdis; for betwixt their coast and ours it is not above twenty three or twenty six leagues in most places, so that if they be taken with a storm at north-west they are cast upon their own shore, where they shall find neither harbour nor road to receive them, but that the merciless sea will devour them: and the like effect they will find with a southerly wind upon our coast, unless they were relieved with our open roads which their own coasts yield not. In my Fifth Book, of projects and stratagems, I have spoken more largely to this point. And to conclude, though France should be able to keep fleets in our Channel in the summer season, when they shall find the weather fair and the nights short; on the contrary, in winter with a southerly wind, storms, and long nights, they will find themselves destitute of

harbours on both sides to relieve their ships when they are in the Channel.

And as for Milford Haven in Wales, whose harbour for goodness exceeds all other harbours in Europe, if an enemy should enjoy it it would little avail him, for all conquerors will covet to draw into the heart of the country they enter, and where the greatest cities are seated and most people resort to them. Let us compare it with London, two hundred miles from it, and let us enter into the condition of Wales, and the poverty of it, where the huge mountains will hinder the passage, and the transportation of their carriages. Consider, likewise, the time England will gain to gather all its forces together to withstand them, and the distance an enemy shall march from their ships if they be forced to retire, and shall be destitute of all other supplies or helps: this will be advantage sufficient for us. Neither can an enemy steal so suddenly upon us but that our fleet will be ready speedily to bid them welcome. These reasons considered, Milford Haven will be made as secure as any port of England.*

The State of Ireland.

There are many choice and good harbours in Ireland, as commonly there are in most countries where there is least trade. The more and the better they are, the greater the danger to England; because an invasion in Ireland does as much concern us as if it were attempted in England. Where there are so many ports, as in Ireland, they cannot so easily be fortified and made strong as if they were fewer. Whereby the defence of

* Cf. *ante*, ii. pp. 268, 277.

that kingdom must depend upon the faithful hearts of subjects, who heretofore have been apt in all ages to shew the contrary as appeareth by their many rebellions.

The southern coast of Ireland is in the nature of England, a southerly wind being dangerous to both; and the greater to Ireland because the coast is more subject to mists and fogs, so that no art or skill can preserve a ship if she be forced to bear in upon a lee shore she has not made.

I have declared in my Fifth Book the danger of an invasion in Ireland, and the best remedy to avoid it by a fleet at sea, to which I refer you. But the safest and securest course I can think on to defend that kingdom is to draw the people by justice and good usage to love and obedience; for then shall their hearts and hands be joined, and made to concur together, for defence of their King and country. Both they and we see that of late years by peace they are taught how to grow rich, which before they were not. They find by his Majesty's conniving with them in religion it has mollified their hearts, that they are not so hardened as formerly they have been, as appears by their voluntary disbursements when his Majesty requires it of them. I am of a contrary opinion to an ancient position held in former times by our statesmen of England—that the safest way to govern the people of Ireland was by keeping them under, poor, needy, and ignorant, like men barbarously bred. Whereas, on the contrary, we see by proof of late times that by our good and friendly usage they are made more tractable to reason, and understand the difference betwixt civil conversation and their former education. They are grown to that familiarity with us and our dispositions, that, if religion did not hinder it,

they would make no more difference to marry with us than amongst themselves, and hold it for an honour to derive themselves from English blood.

We must confess it for a truth that they made our King and both our countries more famous of late years than in former times, by the esteem they have gained in our renowned actions of war where they have served. For those people that were wont to be called by the name of *Kernes*, have obtained the prime places of honourable employment, which I impute to three causes; the first, is to their late civil breeding and conversation in comparison of times past; secondly, that they are not prohibited serving any prince or State, whereby all ancient jealousies are taken away; thirdly, they have that liberty and freedom that they apply themselves to all gentleman-like exercises, both of learning and languages, by which they insinuate into the acquaintance of other nations and people, from whom they learn their customs of civil and mannerly behaviour, acknowledging that preferment comes by virtue, and not by vice. By this alteration his Majesty shall regain sober subjects that have been seduced by evil magistrates.

Of Scotland.

Scotland in divers parts thereof, but especially in the islands of Orkney and Hebrides, has many large and good harbours, and more ships of their own to uphold trade than Ireland has, much to the shame of Ireland, which has a more fruitful country and lies by many degrees more convenient for trade than Scotland does, to the rich countries of France, Spain, the States, and all

southern parts, which afford the greatest plenty of wealth. For from Ireland they may be sooner in those places aforesaid than from some parts of Scotland to Ireland, where they are to begin their voyage. We and other nations find that Ireland many times proves a safety to ships, men, and goods, as it is seated and placed. For ships that are to pass into our Channel from the southward to England, France, Flanders, Holland, or any part of the east country, if such vessels be taken with an easterly wind before they recover Scilly or Falmouth, or fail of victuals, or otherwise distressed, Ireland lies open to entertain them, which no other shore can do with that wind, and much less Scotland, which is so far to the northward and out of all manner of trade. It is pity Scotland is not placed where Ireland is, considering the difference of the industry of their people. For though the country of Scotland yields no commodities worthy of transportation, whereby to make them rich, or can take off any merchandize that is brought them, by reason of the barrenness of their soil and the coldness of their climate, that produces nothing of value to exchange for it, yet they live not idly and lazily as the Irish do, but maintain a number of ships to carry out and bring back such commodities as the country affords or the people stand in need of.

Another happiness to us is that Scotland can make no use of their harbours to benefit an enemy to our annoyance. For Scotland has two impregnable defences, which are no less beneficial to England, *viz.* hunger and cold, that it can no way aid an enemy to invade England from thence, either with victuals or other provisions.

I have often marvelled with myself that in our forefathers' days, who lived in the time of

hostility betwixt us and Scotland, they had not so much foreseeing providence as, being masters of the sea, to endeavour to cut off all the ships, barks, and boats, that belonged to their kingdom, which had been easily effected, or without resistance. For then they had left Scotland to itself, without help from abroad, and forced them to make use of their own commodities amongst themselves ; by which means they should never have tasted the deliciousness of wines, or other delightful things of several kinds which other countries produce. Thus would England have had a greater power over them than by force of arms, and would sooner have brought them to uniformity and obedience to us than by any course of cruelty : the seamen would have soon forgotten their employment and betaken themselves to their trades for food. And one thing I must say in their commendation, that their people are naturally apt to the sea ; they would soon attain to be excellent pilots, which grows by their dangerous and difficult navigations which makes them more vigilant than otherwise they would be. And in the places where they generally traffic they are held worthy of the charge they take upon them. They are no less esteemed than trusted for their honest contracts they make with their merchants ; and it is a means they are sooner freighted than others that carry greater reputation and wealth.

A Proposition to the Parliament on all the foregoing Contents of this Book.

I NEED not make a particular repetition of what is contained in this Third Book because it is open to your eyes to behold, view, and read; it tends to the state of his Majesty's Navy, and the abuse that is crept in by inexperienced carelessness, if not corrupt officers, and such as regard their own profit more than the King's service. Withal, I set down a means of reformation which I presented to his Majesty, part whereof was written at the request of Sir Robert Cecyll, not long before the Queen died; the rest I refer to my Fifth Book.

I will apply myself to you, the Lords and gentlemen of Parliament, for these reasons: the first, because it concerns you more than others, who are the mouths and men chiefly trusted by the multitude of the commonwealth that makes election of you, above others, to speak their cause. Secondly, in matter of security to the State; for you have the same interest with them, as being embarked all in one ship, so that if one drowns the rest must be shipwrecked. And, lastly, because you are the people elected and chosen from the rest for your grave and judicious understandings, that can distinguish and determine according to reason what shall be proposed for the good of the commonwealth; which makes me say the less but refer all to your wise considerations.

The great, and indeed the greatest matter of importance to the State is his Majesty's

Navy, properly called the walls and bulwarks of England. For our ships flourishing bring safety to the kingdom and terror to others; yourselves may challenge an interest in this Royal Navy, as jewels annexed to the Crown that cannot be separated from it. For though the King have the disposing of them, and the only employing them, yet they are like his houses and lands that are entailed upon the Crown and the King can use them but for life.

The kingdom of Portugal falling to Philip II. King of Spain, who came in rather by the sword than consent of the subjects, yet they drew him to large conditions for their freedom. And amongst the rest, because that kingdom stood upon reputation of shipping, they enjoined him to annex twelve galleons by way of entail on the Crown of Portugal for so many brave ships he there found, as appeared by the goodly vessel called the St. Matthew, which I knew, and saw broke up with age, after she had been Admiral of the fleet with the Marquis of Santa Cruz, who overthrew Monsieur La Strozzi at the Islands of Terceira in 1582, and after she had been Admiral for England in 1588 with the Duke of Medina Sidonia; and, lastly, in that service and fleet, that took Sir Richard Greynvile and the Revenge in 1591.*

And seeing we have precedents of other times, and of other countries, to parallel with us for the preserving the honour of England by our Navy; but especially because it concerns us more than the firm land, we being an island that can neither

* The San Martin was the flagship at the Azores in 1582, as well as in 1588. Monson cannot be referring to the St. Matthew taken at Cadiz; it is not clear what ship he means.

defend ourselves, nor offend others, without the help of shipping, I do humbly crave your favourable ears to incline to my propositions following. That besides the ordinary and yearly expense his Majesty contributes to the ships in harbour, you will please to add a certain annual proportion, and to confirm it by Act of Parliament, to be employed as the Parliament shall direct or as the ensuing project shall seem acceptable.

I know that whatsoever I shall propose by way of imposition the word is obnoxious, and you will answer me with a general negative by example of the grants of customs that in continuance of time are grown hereditary. But let the importance of this weighty business concerning the King's Navy move you according to reason, and to devise the easiest way, and with the least charge, how his Majesty's ships may be immediately sent to sea upon an unexpected occasion.

The sum that shall come from you by a voluntary gift, not to exceed 20000*l. per annum*, the moneys to be rated and raised at the discretion of justices, knights, and gentlemen of the shires; a treasurer and other officers to be nominated by the Parliament. And if any innovation shall be attempted to alter this form of government, the payment to cease. That certain commissioners be appointed for two years' space to view and provide that all materials and provisions be kept safe in magazines, and no other than themselves to dispose of them; and every second Michaelmas term to meet and settle all things in good order that at the next sitting of the Parliament it may be presented to the two houses. This will prove more easeful to the country, and less burthensome to the people, by ten degrees, than has been of late years taken,

viz. to call upon them for great sums, and to be suddenly rated and raised by the assessment of one private man that shall for that present year be chosen sheriff; and such a one, if complaints be true, as carries a hand of too great partiality.

By the good husbanding and management of this 20000*l.* *per annum* there will always be ready in cash so much money as will, with little help from the King, be able to put his ships to sea without otherwise being beholding to his subjects. For it is to be supposed that Kings will not have yearly occasion to employ their ships, by means whereof the stock of 20000*l.* will increase. Out of this 20000*l.* there may be provision made to allow thirty able and expert captains, each of them, forty marks, or forty pounds *per annum*, the time they are out of employment, enjoining them to give their attendance when they shall be called upon. Every man shall know the ship he is to command, and no man will be so impudent as to seek to put him from it when employment is spoken of. They shall hold their places, their pensions, and employments, according to their civil carriage and behaviour. For by their example others that expect future preferment must imitate them in their rule of life.

Of all disorders they must abandon drinking, quarrelling, and the occasion that riseth out of such vices; for, if they consider it, drunkenness is but a short madness and therefore unfit a madman should govern others that cannot govern himself. This will be the way to gain a brave reputation in their youth, and an encouragement for gentlemen to employ their sons upon such services on hope of preferment; and it may be a means for the King to take the example of the

Kings of Portugal, who instituted that gentlemen, according to their degrees and births, should have employment at sea, and pensions of the King for life, which they call 'Moradia.'* Every gentleman takes his place according to his pension and quality. And it is not amiss, seeing I am upon this subject, to set down that the occasion of the discontent of Ferdinand Magalhaens, or Magellan, the discoverer of that Strait which took name of him, was upon this cause; for which he left his King's service, and became a creature to Charles, King of Spain, who employed him. Magellan was a gentleman well deserving, and on account of the institution aforesaid he sued to the King of Portugal for a pension of three ducats *per* month for himself, and half as much for his son, who was a towardly young gentleman. The King willingly granted him two and a half but absolutely refused his son, which he took for so great an indignity that he left the King's service, and fled into Spain, where he was employed by the King and Cardinal Ximenes in that noble voyage about the world which was performed by his ship, though he was slain himself. This enterprise of his was prejudicial to the kingdom of Portugal, and he got the name of a fugitive and traitor by it.†

* Not necessarily dependent on any employment. It was a privilege of birth and of attachment to the royal household, and was usually very small in amount.

† This is mostly wrong. It is true that Magellan petitioned for an increase—thirteen shillings a year—of his pension and was refused, partly perhaps because he had returned from Africa without leave and under suspicion of discreditable dealings with the Moors, but no doubt chiefly because the King, Dom Manoel, disliked him. Magellan did not fly into Spain but was given contemptuous leave to go; he was not then married and had no son, and he never met Cardinal Ximenes de Cisneiros, who died a month after his arrival at Seville. Probably Cardinal Adrian of Utrecht is meant.

To make out this degree of gentlemen, and their employment I have spoken of, I was acquainted with it when Sir Richard Leveson and I took the carrack in Cezimbra Road. For when I went aboard her, to treat about her yielding, I found four hundred gentlemen of this fraternity with arms to defend her, all apparelled like courtiers for their reputation they held by their employment and place.

The Beginning of our Resort to the East Indies.

THOUGH the Queen was so wholly taken up with her warlike actions by sea with Spain, which continued the space of eighteen years, that neither she nor her merchants had leisure nor opportunity to settle new trades in far and remote countries, as the East Indies and other places, which King James of famous memory did when he enjoyed both Crown and peace, as shall appear when I treat of his and King Charles's actions by sea; yet, because those ages and Kings' reigns shall be honoured as they truly deserve, I will speak of the famous enterprises undertaken in the Queen's time to the East Indies; the first by Sir Francis Drake in 1578,* the second by Mr. Cavendish in 1586,† the third by Captain Raymond,‡ in 1591, and the fourth by our merchants of London in 1603, to whom the Queen granted her Letters Patent for the space of fifteen years, which was after continued and enlarged by King James in the year 1609, to remain for ever.§ Where-

* 1577–80.

† 1586–88. There was an attempt under Edward Fenton, in 1582, but the squadron only reached Brazil.

‡ Captain George Raymond. He was lost, with his ship, the Penelope, in the Indian Ocean and the expedition continued under Captain James Lancaster. Another attempt, in 1596, under Captain Benjamin Wood was unsuccessful.

§ Cf. *ante*, ii. p. 293; the first East India Company's ships, four in number, sailed 13th February 1600–1 under the

upon the East India merchants built in the same year the goodliest and the greatest ship that ever was framed in this kingdom, though she proved not so fortunate to them as ships of less burthen that I have spoke of in my Second Book.*

The increase of great ships in England may be derived from this beginning; and to make it the more wonderful, it is strange, if we consider the few ships and the small burthen of them in the memory of man, to what they are now. For till of late, which perhaps few will believe, the greatest part of our ships of burthen was either bought or built out of the east country, who likewise enjoyed the greatest trade of our merchants in their own vessels.

And to bid adieu to that trade and those ships, the Jesus of Lubeck, a vessel of great burthen and strength in those days, was the last ship bought by the Queen, which in the year 1568 was cast away in the port of San Juan de Ulua in New Spain, under the command of Sir John Hawkyns.† And from that time to this, if we consider the increase of ships which England trades withal, but especially of later times in the reigns of King James and King Charles, we have great cause to give God humble thanks for His blessing poured upon us, for our strength of ships and wealth of subjects, both much increased by our navigation.

command of Captain James Lancaster. The second charter, 'for ever,' was of 31st May 1609, but with the proviso that it might be withdrawn at three years' notice if found to be unprofitable to the kingdom.

* The Trade's Increase of 1100 tons. After running aground twice she was burnt at Bantam, during her first voyage, while careened for repairs, an accident due either to carelessness or the enmity of commercial rivals.

† The Jesus of Lubeck was bought by Henry VIII. She was taken by the Spaniards at San Juan de Ulua.

I cannot say our first voyages to the East Indies were by the way of traffic, as our latter years have produced. Captain Raymond was accompanied with the Penelope, a ship of his own, with the Merchant Royal, and Edward Bonaventure, three prime ships at that time both in greatness and goodness: their employment was to obstruct the trade of the Portuguese, and to seize their goods by way of letters of reprisal.

These three unfortunate ships arrived at the Cape of Good Hope, where they resolved to send home the Merchant Royal with the sick men, and to proceed on their pretended voyage designed in England, but Captain Raymond himself was unhappily swallowed up in the sea fifty leagues from the Cape. The Edward Bonaventure performed her voyage, but failed, as the rest did, in the hope of profit, for neither the men nor the adventurers were a penny the better for that voyage; and unluckily at her return, after she had passed many miseries and dangers, at last she arrived in the West Indies whither she went for relief being mightily distressed. And arriving at the island of Mona, her company resolved to cut her cables to drive ashore, choosing rather to do such an unworthy act than to venture into England with her, their case was so desperate.*

Most part of her men were saved by a French pirate that hovered about that island, one of whom, Henry May by name, was embarked in the said French ship, and in her return homeward was wrecked on the island of Bermuda, who gave us

* The cable parted during a gale while Lancaster and most of his crew were ashore; at least that is the official version, but Monson may have known more. The Bonaventure finally reached Plymouth, and Lancaster and his companions were given a passage home in a French ship.

the first public knowledge of that island; for before it was supposed to be enchanted, and possessed by spirits, though I knew the contrary.* For above twenty years before this happened I was acquainted with a French captain, called Russel, who was also shipwrecked upon the same island, and escaped by means of a boat he and his company made out of the materials of the said ship, in which with great hazard they arrived upon the coast of Newfoundland, where they were relieved by fishermen of their own country.

* May had been sent home by Lancaster, in a French ship, to give information about the voyage. The vessel was wrecked on the Bermudas which had been discovered in 1522 by Juan Bermudez.

The Competition betwixt France and Spain by Sea, and Conclusion of the Third Book.

A FRENCHMAN meeting a Spaniard or Portuguese beyond the line,* or in either of the two Indies, they hold it a thing justifiable by law to seize upon either, especially if they make the first shot at the Frenchman, pretending that he gave the first offence ; and that thereupon they offered him violence and that themselves are but defendants.

The Spaniards and Portuguese answer to this that the French being no discoverers of countries beyond the line, or in the Indies, they can challenge no more right to the countries and seas than pirates of other nations can do. Neither have they any colour to haunt those shores and seas but with a purpose to rob and spoil, seeing they, and all nations besides, know the King of Spain prohibits any traffic in those parts but to his own Spanish subjects. They further say that there is no ship but will in her own defence, being chased by another and ready to be assailed and boarded, shoot first ; for it is an old rule in a quarrel, ' That he has the advantage who gives the first blow.' And therefore this lawful resistance of a poor merchant ship, that goes not out of his way to seek others, but avoid meeting of all, cannot be reckoned a breach of peace and consequently a forfeit of ship and

* Not the Equator but the line of longitude by which Pope Alexander VI, by the Bull of 4th May 1493, divided the new discoveries between Spain and Portugal.

goods; this is against the law of nature, for a worm, if she be trod on, will turn. And besides, whereas merchant ships go commonly armed to defend themselves against enemies, by this law, and contrary to all sense and reason, their safety must consist in going unarmed that they may be unable to make defence, lest they be quarrelled with and thereby made a prey to all ships they shall meet at sea.

The assailant, whom you may properly call a pirate, has sometimes other pretences, as namely, the want of victuals, or their ship being leaky, or ready to founder, to exchange ships with them.

The Spaniard desires that these deceitful excuses and false pretences may with uprightness be considered. To the first, they say that a merchant ship that carries ten men cannot afford two days' victuals to a man of war that carries a hundred men; for ten days' victuals after that proportion is but half a day's victuals to a ship of war. To the second, it is to be considered that if one ship be exchanged for another at sea it must be the stronger that compels the weaker to it. And as a thief that robs by land makes the offence much more horrible by committing murder, so does the ship in this case; for if a hundred men be not able to keep the ship above water with their pump or baling, what shall ten men do in that ship but sink or perish with patience? Here is both theft and murder committed upon poor innocent people that offer no man molestation, nor go out of their course to seek acquaintance. But if this stands for a law a pirate will make no conscience to bore a leak in his own ship to serve for an excuse.

Therefore, I conclude, it is not the first shot that can be adjudged a breach of peace betwixt

two ships that accidentally meet at sea, or that it shall make the assailant's cause the better. For, in truth, the offence is given by the ship that chases and has no cause to do it but only to give an occasion of quarrel that thereby he may rob and spoil him. He it is, I say, that deserves punishment as a pirate, and not the poor defendant that does no more than nature and reason oblige him to.

I would ask a Frenchman, whether, if a Spaniard should meet him upon the coast of Canada, where the French have a plantation, and there chase him, and that the Frenchman for his safety should fire at him he would think it reason that the Spaniard should take and enjoy him as lawful prize? No, I am rather of opinion that the Frenchman will believe as I do that the Spaniard is worthy to be hanged for a pirate.

And yet the comparison is not alike, for the French cannot account Canada their own as the Spaniards may do the Indies, because Canada was first discovered by the English in the days of Henry VII. as all the world acknowledges, and none but the first discoverers can pretend title to any land newly discovered. This is the title by which the King of Spain holds his Indies, both East and West; and this is the title by which the King of England holds that part of America from fifty-eight to thirty-eight degrees, and has so held it since the discovery of it by John Cabot, and not above two years after Columbus found the West Indies. And by this right, likewise, the King holds the islands of Greenland ever since the year 1607 when discovered by his subjects. And moreover, I say, that such Kings as are discoverers of new or unknown lands are bound in equity and reason to defend one another's titles in this

point, and not to connive or give assistance to any other prince or country to break this law and custom for other nations to encroach upon them. For they had as good disclaim their own rights and suffer all other dominions to usurp over them. It is the case of our fishing which Holland impugns.

When King James granted his patents for the planting America he would always admonish the patentees to be sure to keep to the northward, lest they should plant in such places as the Spaniards might challenge to be within the compass of their discoveries. For he ever intimated that he would defend them no farther than the articles of peace did warrant him; and if they did otherwise they were to stand upon their own legs. This I have been often told by the Secretary of State who is acquainted therewith. This limitation princes put upon their own subjects in giving them patents, which subjects duly observe. Queen Isabel of Castile would not suffer her husband's subjects of Aragon to go to the West Indies, many years after the discovery of them, because she and her Castilians had the honour and fortune to find them. The Portuguese to this day enjoy their ancient and accustomed trade to the East Indies, Guinea, and Brazil; and the Spaniards are not suffered to go there because the Portuguese were the first discoverers of them.

Our King out of some considerations prohibits the trades of the East Indies, Russia, Greenland, and Turkey, except to some particular subjects, to whom he grants his patent.

The Hollanders, who are refractory to all good laws and institutions established by Kings, however observe this rule among themselves—that they will not suffer any of their people to trade to the East

Indies but those whom they incorporate, and call the East India Company. And though William Schouten has discovered another passage into the South Sea than through the Straits of Magellan, a voyage of fame to the undertakers and nation, yet at his arrival in the East Indies, where he thought to have found succour and relief from his countrymen, most ungratefully and cruelly they seized him, his ship, and all he had, and used him as rigorously and unnaturally as if he had been a professed enemy or pirate.

The French, above all other nations, have always impugned the right of the first discoverers but not without the great punishment and just judgement of God upon them, as appears by many of their actions, as namely, in Canada, which was taken and spoiled by us in 1628,* as also in Florida and Brazil, that was destroyed and ruined by the Spaniards. And it is worthy of note that they never lived in any of these colonies, but civil dissensions, famine, and murders fell upon them; a just reward for the injustice they did.

The King of Spain is so cautious not to give offence in this case that when Greenland was discovered by the English some of his Biscay subjects repaired thither to kill the whale for oil, being more expert therein than any other nation. But the King of Spain considering what wrong was done to the King of England by it, and that it might concern him in the like case to have his Indies encroached upon, he prohibited his subjects going to Greenland to molest or hinder the English in their fishing, and afterwards gave

* This refers to the semi-buccaneering venture of Henry and David Kirke, repudiated by Charles I.

assistance to the English and instructed them in the manner of their whale killing.

Subjects that desire to plant in countries they have not discovered, and therefore can claim no title to them, run many desperate and unavoidable perils. First, because the articles of peace do not warrant them, for by that law of peace we are only to enjoy our ancient and accustomed trades. Secondly, they go upon their own adventure, for the King will not break league with Spain for their particular cause. Thirdly, they live in perpetual danger from their neighbours near adjoining, whom they may term enemies; but principally I would have them consider what an excessive charge they undergo before they can bring their country to perfection, which affords nothing but wood, water, and grass. To instance, in an island of ten or twelve miles in length, and half so much in breadth, which some Englishmen have with a wonderful charge of late years planted, and I fear with little hope of profit to return to them. But I make account no man can be so ignorant as not to know that such undertakers do it for other ends, or have other hopes of gain, than to reap it out of the earth of ten or twelve miles. But it is rather suspected they do it to nourish and uphold piracies, that by the spoils thereof they may be the better able to maintain that island, or to give a distaste to Spain with whom they desire his Majesty should have war, not considering what the end of war is, and how difficult it is to make a peace after such a war is once begun by two great princes.

But now to return to my former proposition or argument, of the competition betwixt France and Spain, of the French surprising the Spaniards

and Portuguese beyond the line, I will conclude of nothing, only deliver my opinion what France had to say in its own defence.

Sir Francis Drake returning from his famous and fortunate voyage round the world in 1580, the Queen found that by the passage through the Straits of Magellan, which Drake had gone, there might be convenience, if ever there happened hostility betwixt her and the King of Spain, to annoy him in the South Sea, from whence all his treasure and wealth was brought and after dispersed through the world. In the year 1582 she employed two good ships as any in the kingdom except her own, and committed the conduction thereof to Captains Fenton and Ward to prosecute the same voyage that Drake had happily performed and taught them. But as nothing is more uncertain than the chances and successes at sea, being governed by inconstant winds and waves, so did this voyage of Mr. Fenton's prove most unlucky, for they failed in all their designs, as you may find in Mr. Hakluyt's book; to which I refer you.

The King of Spain having intelligence of the design of Queen Elizabeth, and the preparation of the ships aforesaid to perform her intention in the South Sea, and knowing it could not be brought to pass but through the Straits of Magellan, he directed his letters to Lima in Peru, commanding one Pedro de Sarmiento, a choice and perfect navigator, to pass from Lima to the Straits of Magellan, that way by the South Sea, which was never before purposely attempted, for by reason of the forcible westerly winds that blow upon that coast, which make it a continual lee shore, it is not to be enterprised without great peril to the undertakers.

Pedro de Sarmiento with two small ships proceeded upon that voyage as he was directed by the King, one of them returned again to Lima, the other, in which Sarmiento was, recovered the Straits and so passed into Spain, giving the King an account of the narrowness of the Straits, in order to fortify it and to endeavour to stop any ships that should attempt to pass that way. But all was false, and the King egregiously abused by his report, for there was no place within those Straits less than three miles in breadth. He likewise gave a favourable report of the pleasantness and richness of the soil, to encourage men there to inhabit, but in the end it proved the most unhappy and unfortunate expedition that ever the Spaniards undertook. The King being pleased with this intelligence, hoping thereby he might intercept all ships passing that way and secure his coast of Peru, Chile, and other places, which afforded him all his treasure, he sent twenty three great galleons and three thousand five hundred old soldiers under the command of Don Diego Flores de Valdes, a principal commander by sea. He also sent the said Pedro de Sarmiento with commission to erect fortifications within the Straits and to take upon him the title of governor. But as I have spoken somewhat of the mishap of our English ships, so I must say the Spanish fleet succeeded ten times worse. For of the twenty three galleons and the three thousand five hundred soldiers aforesaid, few ships or men returned, which was a great loss to Spain at that time ; for in two or three years after ensued the wars betwixt them and us.

Those soldiers designed for the Straits, being crossed with contrary winds and other vexations, at last arrived there with their governor

Sarmiento, and there seated and fortified themselves in two places. But cunningly and secretly Sarmiento seemed to go from one place to visit another, and foreseeing the calamity his men and he were like to fall into, (for neither the land, nor soil, nor the narrowness of the Straits was answerable to his relation) and being altogether hopeless of relief or succour from Spain, he quitted the place, and treacherously ran away in his bark, pretending, after his arrival in Spain, that he was perforce put from his cable and anchor he rid by and could not return again for wind and weather. In this base manner he left his poor countrymen in 1584, and in two years after, in 1586, Mr. Cavendish passing the Straits in his voyage round the world, found but three of those poor creatures living, and the place so infected with the carcasses of those dead that it was not to be endured. He found only six pieces of ordnance which he brought away with him. But as God is just, and a rewarder of all men, both in their good and evil actions, he accordingly chastized Pedro de Sarmiento for his ill usage of his countrymen. For from Brazil, where he first landed in his way into Spain, he was met and taken by an English man of war,* for at that time there was hostility betwixt the two nations of England and Spain, and brought prisoner into England where I became acquainted with him.

But now to return to Diego Flores de Valdes, who ranging the coast of Brazil as his course led him, had intelligence of a colony of French, planted on a river called Parajua, joining upon the sea with Brazil. Whereupon he steered for that port, where he met and seized five French

* *I.e.* a privateer.

ships, three whereof he burnt, and two he carried with him. The men fled and dispersed themselves amongst the Indians, where to this day are found many savages that resemble Frenchmen in feature of face and may be easily distinguished from others of their countrymen.*

I know not whether others may be of my opinion, or no ; but in all likelihood the barbarous usage of the French colony might be the occasion of the difference betwixt the French and Spaniards for the war beyond the line. And as the cause began by blood, so it is like never to end but by blood ; for nothing is like to compose this difference so long as those two monarchies continue in this greatness.

* Monson tells the story in an involved way. He has taken it from 'The Discourse of the West Indies and South Seas' by Lopez Vaz (Hakluyt, *Voyages*, xi. 227, ed. 1903).

The End of the Third Book.

APPENDIX A.

Bath and Rawlinson MSS.

FLEET INSTRUCTIONS.[1]

(1) The first and principallest instruction that is to be given is to remember the service of God twice a day, evening and morning, according to the church of England.

(2) Item: that every ship hail his Admiral once in 24 hours, in the evening, and take a watchword of the Admiral, and that you have an especial care you take a good berth for fear of becalming or coming on board one another, and this care is to be had likewise when you shall anchor.

(3) Item: that the captain command his officers to have good looking out in the night to observe the Admiral's working and follow it; that is to say if the Admiral cast about in the night, he to shew two lights, the one a head the other abaft, and every ship to shew one ahead until they be tacked and run so far as they think themselves cleared of all ships astern them.

(4) That in every watch there be appointed a principal man to stand in the forecastle every night to see what ships are ahead them or near them, and, being in danger

[1] These Instructions are very interesting in many of the details, especially in the very full provision of look-out men. Moreover, the order in No. 16 corresponds with one of Monson's suggestions in the 'Tracts' which he desired to see made general in all the royal ships. Possibly they were drawn up by him when he took command in March 1603; it will be remembered that the fleet left the Medway on the 22nd, arrived in the Downs on the 25th, and that Elizabeth died on the 24th. The transitional period may account for the reference to both King and Queen in the paper.

to foul one of another, no man to speak to the said ships or to him at helm but the man so appointed; for commonly at such times what hurt is done comes through the confusions of men's voices, some crying aloof, others room.

(5) If a ship be in distress in the night to shoot off a piece of ordnance and the next ship to keep her company until day, but if she be driven perforce to fall astern then to shoot two pieces more, and every ship in the fleet to slack sail to keep with her.

(6) That no ship follow a chase so far as to lose the fleet, but if by accident they do lose it to follow the instructions following.

(7) If there happen a chase the next ship to her to follow her, and if there be more than one chased the rest of the ships to single themselves as they shall be able to judge to overcome them, and if they be brought to leeward by that chase to ply into their height again, or if a headland as they shall be directed by the wind.

(8) When you chase that you wear your flag half furled up in the head of your topmast, so long as you chase, to be known by from other ships.

(9) If the Admiral would have you leave your chase he will shoot off two pieces of ordnance and strike his top sail twice; but if you cannot discern it the next ship betwixt you to take that sign, and so one of another until you discern it.

(10) If you at any time lose company and see one another far off you shall know yourselves to be of the fleet by striking both your topsails at once upon the bunt twice (as thus); he that strikes first shall be answered by the other, and the other shall strike again before the first begin. And this sign shall direct you if you give chase to know the chase from yourselves.

(11) If you make any ship strike in view of the Admiral you must bring her to him without suffering any boat to go aboard her; but if the prize be ready to sink, or if it happen in the night that there is necessity to go aboard her, then the captain shall put such men on board so as he will undertake nothing shall be embezzled.

(12) If you be forced in a fight to board, the better to encourage your men there shall be given an extraordinary reward to ten of the first men that shall enter to be distributed according to the discretion of the Admiral, but the captain must have a care to keep them from spoil. But if any of the said ten men shall enter without arms they are not only to lose the pillage they take but to receive bodily punishment.

(13) If the Admiral show his ancient upon his shrouds, and shoot off a piece of ordnance, all the captains and masters are to repair on board him to council; and by showing an English flag upon the shrouds, and shooting a piece, the captains only.

(14) If you light in company of a fleet by night to strive to get the wind of them and to follow them, showing lights, shooting ordnance and making false fires, which the rest of the ships seeing must answer with the like signs. And if you spy but one, two, or three ships that you carry so many lanthorns on your shrouds as you shall spy ships; so shall the ships next to you know how to proportion themselves in following you and them.

(15) Because the fleet is directed in divers articles by shooting of ordnance, that no piece be shot by day nor night but as is before directed, and that every gunner have a care to preserve his powder.

(16) That for as much as the Queen's ships carry divers loiterers that are not subject to labour, as swabbers, shifters, stewards, coopers and cooks, I would have these men trained up with their pieces until they be made perfect shot, and to instruct them how to carry themselves and where to stand in a fight;[2] appointing one above the rest in every squadron to direct and govern them which shall have the name of corporal though the King[3] allow pay but for one.

(17) That you have a care to treat and use well all ships that you meet at sea that be in league with her Majesty.

[2] Cf. *ante*, p. 61.

[3] *Sic.* Corporals were employed in 1588.

(18) That you continually keep a man or boy in the head of your top mast, and as one goeth down another to go up and supply his place.

(19) That you forbid play in your ship for money, and severely to punish swearing, cursing, stealing, fighting or quarrelling.

(20) If your company find themselves aggrieved for their victuals, or upon any other occasion, that they make choice of two or three of the most sufficient men to complain in a civil manner, not in a mutinous or uncivil sort.

(21) To appoint two in every watch to walk up and down in the ship to look to the light, and not to permit any light out of the lanthorns or in cabins.

(22) That every ship shall wear his flag according to the custom of the sea as the Admiral, Vice-Admiral, and Rear-Admiral. There are many other considerations which your experience is able to teach you that I refer to your care.

Sloane MSS. 2,497, fol. 47.

ORDERS FOR THE FLEET.

[Copy. Unsigned.]

ORDERS, set down by common consent by the Commission appointed by the General, to be observed in this army; being dated aboard the Dreadnought, the 26th of March, 1589.[4]

First, whereas great complaints are made to the General that the ships are more than overcharged with a number of boys and many others, gentle persons, as

[4] Drake was then at Plymouth. We should have expected a man of his experience and authoritative temper to have drawn up the orders himself instead of leaving them to the debates of a commission. But they are evidently only for use in port.

sick and lame, it is thought good that every captain and master of every ship do presently [5] take such care as to see them discharged that, when a muster master is sent aboard, either here or at sea, there be not found aboard them any of the said persons or boys, under pain that the neglect thereof shall be laid upon the captain and the master and to be dismissed of their places.

All captains and masters shall see all disorders and offences punished; if it be great, to give knowledge unto us that the General may understand thereof.

All captains and masters shall have especial regard that they anchor and moor one clean of another either or wheresoever they be come, and always the lesser to give place to the greater and especially unto her Majesty's ships.

All captains and masters shall give strait charge to their gunners, boatswains, pursers, and their officers that there be no embezzling of their victual, munition, or any other provision whatsoever on pain of death.

All captains and masters shall in any wise keep [6] their mariners and sailors (in all that may be) aborded [7] for the better and speediest despatch of all things that are to be boarded and embarked.

All captains and masters shall take a great care of their sufficient watering with all expedition.

Item, forasmuch as by trial made it is seen that the whole country hereabout is by no means able to afford this great army so much victuals as daily in the same is spent, it is therefore thought behoveful that the whole companies, as well of mariners as soldiers, do sit six of them to every one mess, whereby the good proceeding of this enterprise (in all that may be) be tendered, and herein the General do make promise to make a greater recompense unto the said companies in the pays and purchase [8]; then this course is taken for their allow-

[5] Immediately.

[6] In every way keep.

[7] On board. See Cotgrave's Dictionary of 1611, s.v. *Aborder.*

[8] Plunder.

ance, for every day for six men being two and a half gallons of beer, three pounds of bread, four pieces of beef,[9] and for fish days three fishes and one pound of butter, and to make three fish days in the week.

Item, that in harbour the flag be set in the waist of every ship at the due hour appointed, and such as without a lawful occasion be absent at this hour ought in no wise to have no after allowance at all.

You shall give especial charge to avoid the danger of fire, and that no candle be carried without a lanthorn, wherein if any disobey you shall punish them extremely.

You shall have especial regard that no contempt be suffered between the mariners, soldiers, or companies; forbidding also all picking, stealing, quarrelling, or swearing, dicing, carding, and such other like disorder as may breed discord or Almighty God's high displeasure.

No person whatsoever shall depart out of the ship wherein he is placed without special leave of their lieutenants upon pain of death; nor any other inferior officer upon pain of further punishment according to their offence given.[10]

No person whatsoever shall dare to strike any captain, master, or other chief officer, or any of their lieutenants upon pain of death, nor any other inferior officer upon pain of further punishment for the offences given.[11]

You shall take especial charge that your night watch be always duly kept, and especially to have four continually appointed in the forecastle and beak-head to look out, whereby to be ready to avoid all dangers of practices which may happen.

Item, to the intent that these orders may come to the knowledge of every man, it is commanded that the

9 The piece of beef weighed 2 lbs. Four flesh and three fish days.

10 Meaning: death for the men; for inferior officers punishment at the discretion of the Generals.

11 In the MS. it runs 'punishment to the officers given,' evidently an error of transcription. The meaning is: death for striking a superior officer, discretionary punishment for assaulting a petty officer.

captain and master do give order that in every ship they be publicly read at the least twice or thrice every week in the service times.

Sloane MSS. 2,497, fol. 46.

CERTAIN ARTICLES SET DOWN BY THE CAPTAIN AND MASTER NECESSARY FOR ANY SHIP.

[Undated.[12] Fair copy.]

CERTAIN articles set down by the captain and master, necessary for any ship, as followeth :—

Imprimis, whosoever do sleep at the time of God's service, being sufficiently called, he shall have a cobkin [13] of all the officers in the ship.

Item, whosoever do talk any beastly or filthy talk at his meat, he shall have a cobkin of his mess.

Item, whosoever do swear or blaspheme the name of God at cards, dice, or at his meat, shall pay a penny for every oath to the poor man's box.[14]

Item, whosoever do make a mutiny for his victuals,

[12] This occurs in the same volume of MSS. and in the same handwriting as the preceding paper. From the character of the contents of this volume it may be surmised to have been written by a gunner who made copies of orders relating to the voyages in which he took part, and notes of matters relating to his art. These articles probably refer to a privateer rather than to a man-of-war. On the subject of punishments on board ship, see *ante*, p. 130 and iii. p. 436.

[13] Cobkey, cobkin, or cobbing, a punishment with a stick originally. Marryat has one of his heroes cobbed with a stocking filled with sand.

[14] If the 'poor man's box' means the Chatham Chest the paper is not earlier than 1590. But probably the Chest is not indicated, and the reference is interesting as showing a rudimentary attempt at a benefit fund which, preceding the Chest, was perhaps usual on board all cruising ships, and possibly in merchantmen as well.

being proved he to have sufficient, shall stand bound to the main mast.

Item, whosoever do sleep his watch, being sufficient called, the first fault committed he shall have a cobkin of all the officers in the ship and the second fault he to have three buckets of water poured on him.

Item, whosoever is found to draw any weapon in the ship upon his fellow, he to be ducked three times at the yard arm.

Item, whosoever do give a blow in the ship or be found to be a mutinous fellow, he shall stand bound at the main mast to the discretion of the captain and master.

Item, what pillage soever is found aboard any ship, that shall be brought to the main mast and there the officers appointed shall share it among the whole company, every man to his deserts.

Item, whosoever is found to keep any treasure or any other thing whatsoever above the value of forty shillings, he to lose his shares for the whole voyage.

Item, whosoever is found to steal from his fellows, he to stand bound to the main mast to the discretion of the captain and master.

Item, what ship soever is taken, every officer is to have his right that is due unto him, and not one to take any of his fellow's upon pain of losing of his shares if the man be sufficiently found in his offence.[15]

[15] It will be noticed that these punishments are much milder in character than the orthodox ones decreed by authority. They are of a type indicating agreement by general consent, for mutual advantage, in place of the severity of legal command.

APPENDIX B.

State Papers, Dom. Eliz. cclix. 48.

JOHN YOUNG'S 'NOTES ON SEA-SERVICE.' [16]

To the Right Honourable and my singular good Lord the Earl of Essex whom God preserve in long life in all perfect felicity and happiness to the glory of God.

Certain brief notes and necessaries, with objections for warlike affairs, concerning two Princes' armies of ships meeting upon the seas, to encounter the one with the other. Which I do set down of mine own simple experience, and learned in divers and sundry Princes' service in foreign countries, thinking no less than my bounden duty to acquaint your honourable Lordship therewith.

1. Imprimis; the service of God, obedience to a Prince and Commanders and Governors, with declaration of Punishments duly inflicted upon the Offenders without partiality, and reasons alleged therefore.

The first and principal point is to serve God and

[16] Young commanded the Bark Yonge, one of the vessels burnt as fireships in Calais Roads, in 1588, a transport in 1589, and another in 1596. According to his statements in this paper he seems to have seen much service in home and foreign waters. The spelling and punctuation have been modernised; there is practically no punctuation in the original.

obey our Prince, and Commanders and Governors, which is the strongest and best engine of war, with true and humble obedience, to the furtherance of this present service to us committed, for that in not obeying we may greatly hinder, nay overthrow, the present service for that time. Which if we do, it is no less than treason to a Prince and country, and for this and divers other like offences we may receive martial law, and for other smaller faults smaller punishments, as the law of Oleron doth allow in marine causes at sea, present to be done and not to defer the same of and from time to time. For if we do not obey then we do rebel, deserving punishment to the example and reformation of others. For if the first offence be forgiven and not punished, and then when you would punish some others for the like offence, they shall answer you to your shame, and say, if others had been punished then we had taken warning by them and not committed the like offence, so that this arguing may breed much anger, nay rather mutiny or flat rebellion against the commanders themselves in punishing the later offenders and not the first. Which if it so fall out it is for want of good and severe justice at the first, for that one diseased sheep may corrupt a whole flock, for it were much better that one, two, or three be cut off from their wickedness in time than to endanger all the rest by their offence. For it is not possible to govern aright, without good discipline in warlike affairs upon the seas, for that some of the common soldiers and sailors, and some of the mariners and some others, which may be embarked and but brutishly minded, and wilful and stubborn, they may breed by too much sufferance a great contempt or rebellion, and as too much favour may do much harm so too much cruelty may prove worst of all. Thus much I, poor Captain John Young, do declare all these aforesaid and hereafter mentioned upon my own simple experience, and having served divers princes and potentates, in divers of their service and about forty years since; in all which time I have seen many great enormities for want of good justice, as aforesaid, and in due time and at the first beginning of the service.

2. The Lord Admiral as of himself, or by advice of his privy council, to ordain Admirals etc. With a short discourse of convenience of advantages of the Number upon the good resolution in the Services.

The Lord High Admiral may at his will and pleasure make, being at the sea, as many and as few other Admirals as he and his privy council shall think meet, which may be four, five, or six, and as many Vice-Admirals, and Rear-Admirals as shall be answerable to them, but the more the better, for the less in number to every Admiral, Quarter or Quaderant,[17] the easier are they to be governed, and the service to be the better performed of all hands. And if a greater or small fleet of ships do meet and in battle or troop themselves with xx or xxx good ships, and the enemy coming in with xxx or xl ships in troop, or rank, or battle, to fight or skirmish with the others aforesaid, yet it shall be very hard, though they have the greater in number, to part them their troop or main battle, and if they being of a perfect and good resolution, but by boarding or by fire, in divers sort, as may be approved and by good argument, which I do omit. But the strongest in battling of a navy is to fight in breast with the best of her Majesty's ships, and the best of the merchants' ships divided amongst them. That is to say two merchant ships and one of the Prince's ships, if you have so many, or else do you fight in quadrant; for if you fight in troops, being many ships near together, a few great bullets from your enemies will endanger your masts, with great spoil of your tackling in short time, being thus in heaps, but the Spaniards and Turks do hold the half moon in proportion to be the strongest in battling of all the rest. But we are so far unacquainted with this kind of sailing that I do omit it to the judgement of others because it is so difficult.

[17] Squadron, see *post*, paragraph viii. The primary meaning of squadron is a square formation, but it does not seem that Young is using the word in any obscure sense.

3. That the Lord Admiral and the Vice-Admiral may divide themselves, the one to have the Forward and the other the Rearward, to take the opportunities as well for safeguard of our own Ships as to annoy the Enemy.

It is not necessary that the Lord High Admiral or any of the other Admirals nor their Vice-Admirals, they being all in fight, the Admirals in the forward with some of the best merchant ships and the Vice-Admirals and some merchant ships, and they are to second the Admirals and the Rear-Admirals; with the rest of the smallest ships, barks, and pinnaces attending them in the rearwards. For they are better to be divided and waiting or watching all opportunities to help our own fleet, or to annoy the enemy's, which must be done by great knowledge and value, and waiting still the enemy when they will break; which if they do, then to follow the chase to their overthrow, without any recovery, for once being broken they shall not bring themselves together, not that day nor perhaps not at all. And if they be well followed as they ought to be, but first of all we must come very near unto them with some of our best ships, to batter, beat, or endanger to sink some of them with our great shot. And to do this service, if extreme need should require, then by some policy in firing, if you have any such good provision aforehand, which will be very costly and some danger in the doing of this desperate service; for unskilful men it is not meet and for cowards they dare not.[18] I pray God we have not many of these men with us in this voyage[19] for endangering and hindering this service as I have seen come to pass *in diebus illis*.

4. A care especially had in the Gunners for firing our powder and unadvisedly shooting of our Great Ordnance for fear of spoiling our own Ships; and that no Ship presume to go before his Superiors, except he be licensed or

[18] *I.e.* by fireships. [19] The Cadiz voyage.

commanded, upon pain of Punishment therefore to be done, save only to relieve their fellows in Distress.

That all gunners be commanded in the time of service upon pain of death to take good heed for firing of our own powder in any of our own ships, (which God forbid) and especially in shooting of our great ordnance unadvisedly, lest shooting through our own ships our own men and ships may take great spoil, which would be a great discontentment and an endangering of us, and a great encouraging to the enemy if it should be perceived. And that no captains or masters of ships do go before the Lord High Admiral, or his or their Admirals, at the first attempt or assault given to the enemy, or at any time, or between them and the enemy for hindering of the service except the captain and master have commandment so to do, nor between any great ship or ships appointed for that time of service. The neglecters in these causes to be extremely punished, but all men whatsoever in this fleet to keep diligent eyesight of the Lord High Admiral, or his or their Admirals, to be ready to relieve or help them, or any other of their fellows being in present distress or likely to be (which God forbid). And otherwise the neglecters of their duties herein are to be punished most extremely, and dismissed of and from their place for their disobedience, and by their cowardly absenting themselves to the hindrance of the service, which otherwise by them might have been performed, and by their good forwardness and in due time. For, that once time lost in these warlike affairs is not to be gotten again, the offenders in this offence are not in any wise to be tolerated for that very great danger lies therein.

5. What be the Advantages and how to be taken if the Enemy break, wherein as Fireworks are very necessary so the knowledge of them is reserved to private speech and not to public writing.

And when two navies or fleets meet and be joined in

fight, then it is convenient that some good ships, barks, and pinnaces, being of the best sailers as near as may be, and order being taken aforehand and in due time, to the intent when the enemy doth break to be ready to take all advantages of them, if it so fall out and they being amazed with extremity of the fight. But this fight must first of all be performed with the best of the Prince's ships, and the best of the merchant ships, chosen out of purpose for this present fight, and not to trust to the smaller sort of ships, or barks, or pinnaces weakly appointed and manned, whose forces are but small and weak, more than to wait or hang on and to give their attendance as occasion may fall out by necessity. And then the smaller ships, barks, or pinnaces, they are to come aboard of our own great ships they being thus in great fight, to the intent to enter their men, and so to supply this great fight. And in this great fight, in the end, if the enemy do break and scatter of themselves as it is likely they will, then our best soldiers, as aforesaid, to follow the chase. But if we cannot prevail by the extremity of this great fight, and yet we remaining in danger of the enemy and not prevailing at all, then it shall be very requisite with all speed possible, as aforesaid, also to use the practices with fireworks, and with other policies of sundry sorts of firing which in despite will either break them asunder or consume them, which must be done by very manly valour and courage, and by severe knowledge also in the doing thereof, which otherwise will breed great annoy. Which I do leave unwritten, leaving the signification of the same or others to speech, neither giving advantage to any speculators, either to know the same, nor disadvantaging which might otherwise ensue.

6. Each Ship to be ready to assist Ships and Men if by any Casualty they may be in Distress.

If any of our ships (as God forbid) do lose their masts or be ready to founder, that then presently the next ships, barks, pinnaces, or boats being next unto them to save the men, or if it be possible to tow away the hull of the ship. Though the mast be shot overboard yet there

may be good shift made with jury masts and yards to save the ship, and to serve again presently, and if there be good provision made ready aforehand to do this as beforesaid and if it be possible. For that we may not forsake our own ships for every slight danger or occasion, but to serve still, and if it be possible so to do or else not.

7. A watchword aforehand for the Night and foggy weather, to discern between our own Ships and the Enemy's and so accordingly to give Intelligence.

And that there be a watchword aforehand for the night and also for foggy weather, for even at such time we may meet with the enemy and by our watchword we may discover and know the one from the other, and so thereby discern the enemy and so to give advertisement unto the Lord High Admiral or the next of the fleet as occasion shall serve. And that also there may be appointed a scout watch to lie at large abroad at the sea, to the intent to discover the enemy or other whatsoever and in time and aforehand to give knowledge of their coming for the better security of all the navy here present, that they may make themselves ready upon the intelligence given, and to intercept them if they be enemies; but if they be in amity with her Majesty to entreat them well accordingly, for that no ship must pass by us but they must be spoken withal or fought withal. And also, specially, if it be possible that every good ship to have two shifts of sails belonging to her and good store of poledavis or meedernep,[20] and marline and twine to make or mend sails if they chance to be burnt or torn or otherwise wasted; and good store of pump leather and pump nails and other nails of all sorts and spikes for store, and sheet lead, and salt hides and dry hides to cover powder, and good store of all other provisions and needful necessaries to make fishes for masts and yards, with divers others which I do leave to officers of ships to call for by name.

[20] Breton or Dantzic sail canvas.

This article ensuing is most needful to be observed in all points, as shall appear, to discover the good service and the bad.

8. For discerning of Colours; how each Admiral, Vice-Admiral, and Rear-Admiral may be known of their several Companies, as well to discern our own ships as the Enemy's.

That the Lord High Admiral, or any of the Admirals having charge of their several squadrants or quarters, and companies unto them appointed, and if they would know which of all their companies or squadrants so appointed do come into the fight or no. Then it is very convenient and very necessary to know who doth or doth not come in, and that every Admiral and all his own company must wear upon their mizen yardarms pendants, and look how many Admirals you have—so many several colours of pendants you must have also, unto the full complement of your ships, barks, and pinnaces. By which means and being accomplished you shall easily see and perceive who doth come into the fight or not, which without these sundry colours of your pendants it cannot be otherwise perceived, for that divers ships being something afar off may resemble one another and not be known the one from the other but by these sundry coloured pendants. And that the colours may the better be known from those of the enemy's, and if they chance to have the like, it shall be then convenient that upon our mizen flag staves or the end of our bowsprit and that there be but a small little flag with a red cross it being but a little bigger than a veine of a great catthe ;[21] and further it is to be remembered also that every Rear-Admiral have a large and a full great flag upon his or their mizen flag staves whereby the better and the easier to be known from the rest of their own fellows according

[21] Qy. 'vane of a great cat.' Cats were vessels of from 300 to 600 tons. Ipswich cats were largely employed in the coal trade down to the first quarter of the nineteenth century. 'Cath' is one form of cat (Skeat).

to the custom of the sea. And also that every ship, bark, and pinnace shall have some direction from the Lord High Admiral where to find them if they lose company.

9. Steel tiller bows[22] with divers sorts of Fire-works, Murdering pieces, metal balls, and Mortus[23] pieces, with others.

And that every ship if it be possible shall have some steel tiller bows with good store of fire arrows and other arrows also very necessary, and they be of good defence either by sea or land, and if the fire arrows be well provided forthwith, all needful necessaries to them belonging, they will do much good service or else not. I speak this much concerning the bows and arrows for that xxx years past I devised them to be made in Rochelle in France by which means in those first services of the Queen of Navarre and the old Prince of Condé, and in their time, these bows with the sundry provisions that I devised to them it did breed me such credit that being there placed I could hardly get away from them. Which provisions and in some sort being a secret I do omit and defer to speech, and also it is good to have divers other fireworks as pikes and fire balls and lime pots well powdered, with fire matches made fast to them, and fire trunks and gally glasses which if they be made of wood they must be well plated or bound with iron for bursting; but those that are made all of iron and after the old fashion they be best and will hold the shooting off to the scouring of your decks or close-fights, and also other murdering pieces to be discharged with hail shot for the same purpose aforesaid, with other provisions fit for such purposes as in time of necessity (which God forbid). And it is good also to have some of the great fowlers or the other great murdering pieces of all which shoot many bullets, and also to have bags or cases filled with pieces of old iron or other rubbish to spoil or kill the enemies in their boarding or being entered into us then to scour the fight, and also to have some great mortus pieces which shoot many balls of

[22] Cross-bows. [23] *Sic.*

fireworks at once and they are to be used when the enemies do come near unto us in great troops or there riding at anchor; for it would be very honourable to use those mortus pieces and also flying rockets at the setting of the watch for royalty and triumph, which would make very fair shows to the disgracing of the enemies. And more, for defence, rings and rolls of fireworks and hooks made fast to them that they may take hold where they shall light or be cast and out of our ships' stocks,[24] or from our poops or forecastles of our ships into the enemies' sails, or aboard them they coming so near us; and especially if the enemy be also to leeward of us it is then the more safer and better for us boldly then to cast these fireworks or any others we having the weathergage of them. And also to cast metal balls of brass they are to be thrown also into the enemies' ships, which the old master gunners can well make and give good direction for the using of the same, which fireworks being used in due time and season fit for the purpose it will much annoy the enemy to our great comfort and their great danger.

10. The advantage to get the Wind or otherwise. How each Ship shall behave themselves as well for Fight as for Sailing, as otherwise.

It shall be good for the smaller fleet with the lesser forces to get the wind of the enemy and if it be possible, if not then they have no other refuge but to go large. If the lee shore let them not, which is the worst enemy to be doubted, or the greater forces of the enemy to be too strong for the smaller fleet as aforesaid, then to go large to the intent to bring the enemies into his own wake, and then to pack on a good sail and so to get the wind if it be possible; but if some get the wind and some get it not the ships so to leeward must needs of necessity either cowardly to fly or else to embattle or troop themselves with the best ships they have next towards the

[24] Here, and in Smith's *Accidence for Young Seamen*, 'stocks' appears to be used in a sense of which there is at present no dictionary explanation.

enemy, being in fight, and while the enemies being a spoiling these leeward ships and if it do so happen (which God forbid). But in all this time we that be there followed, and also to windward as aforesaid, for the honour of our country and our own credit we must not leave these our own ships in this distress but we must with great courage and warlike skill bear up upon the enemies they being thus a-spoiling, but then we must come very near as it is possible to do, always remembering to keep ourselves clear, especially with her Majesty's ships, and so coming very near unto the enemy we shall pay them sure with the great and small bullets, and also as aforesaid with fireworks, and other good means, which may be devised to stand in good effect and to break their force and disappoint them of their purposes and relieve our own people as by good policies it may be done, but it will be very great charge and great danger to the executing thereof. But if the Queen's Majesty and your most honourable Lordships will use the Romans' golden rules that is to give good pensions or liberal rewards to good servitors for their good service or being maimed in service, and not to let the maimed servitors to suffer want or go a begging as they have done *in diebus illis*, you should have one thousand men to do more good service than some three thousand. For that base poverty doth make men timorous and to shrink at service for doubt of being maimed and so do fall into misery for lack of maintenance.[25]

11. Our own Ships not to board one another at the Sea or otherwise, for causes set down in this Article.

That every captain and master be commanded upon

[25] By the 39 Eliz. c. 17, the justices of the peace of the districts to which soldiers or mariners belonged might tax the hundred for their relief until they could be given work. By the 43 Eliz. c. 3, every parish was charged with a weekly payment for the relief of sick, maimed, or wounded soldiers and mariners. This, of course, was of later date than Young's complaint.

pain of imprisonment not to board one another of our own fleet and being at sea, for that it is so dangerous a thing which may greatly hinder the service and also much endanger ourselves in this coming foul one of another, so in effect the greatest ship of her Majesty's the Lord High Admiral only excepted, for any other is to avoid the danger they are like to come into. For the great ships are to flat,[26] or to shake in the wind, or to bear up, or to cast about, to the intent to keep themselves clear the one from the other as well of the greatest as of the smallest ship, or bark, or pinnace, to avoid all dangers which might happen by wilfulness and stout stubborn and lewd working, which deserveth great punishment being wilfully committed of either part great or small, the Lord High Admiral only excepted. And the rest in these causes not to stand too much upon their reputations or greatness, although it should be one of her Majesty's ships, for that the smaller ships, barks, or pinnaces they may by some misfortune fall so near the great ships against their will, for in reason the weakest is in danger to have the worst, and they are in great danger also without great good help of men presently, or else they are to be utterly spoilt by coming so near the great ships. Which if it do so fall out will be their loss and hindrance and prove sufficient punishment for their bad working if they be merchant ships; but if they be any of her Majesty's ships then it is to be extremely punished and the captain and master of the same ship to be dismissed from their place to the example of all others if they in any of the great ships do commit this offence stubbornly or willingly, or idly; as in presumption or unadvisedly it is not to be tolerated for I have seen great commanders die for the same offence.

12. Orders set down for the orderly Government of the Fight, with the division of Companies, and a dutiful Request for the sufficient manning of them, with necessary Reasons inducing thereunto lest repentance come too

[26] Flat-aback.

late. An humble suit to your Honour in this article concerning Myself.

And that not any of our ships do not fight with all their men at the first, nor second, nor at any assault nor attempt given to the enemy, except great extremity do compel thereunto by the enemy in boarding of us, but do you divide your companies into 2. 3. or 4 parts, according as your ships are manned, for the supply of your fight and in this doing you shall find great ease. For otherwise, if your whole companies being aloft in heaps, a few bullets from the enemy will spoil many of your men in short time to the weakening and hindrance of the service; for if your ships, as they ought to, be well manned as in other countries they do use to do where being near unto their own homes, and they do allow three men for every two tons throughout in general. And we being also here upon our own coasts we may much the better be able to bear the charge and the double manning and in doubt that the enemy should or doth willy nilly[27] come aboard us perforce, and we then allowing three men for every two tons as well as they do, then we may divide our companies into 4. 6. or 8 parts as well as the enemy doth to prolong the fight, by which means and by God's grace we shall be able to hold out the fight as long as the enemy in despite of them. But otherwise for lack of well manning and shot and powder, especially I say for want of them, either shamefully to fly or to endanger our ships cowardly to be taken for want of men or other warlike furniture, which the Lord God for His mercy's sake forbid that it never come so to pass, and so repentance coming too late. But as concerning galleys and galleasses, which be very dangerous to be joined among ships, may it please your Honour to employ my service for my country's good. I offer to the consummation my dearest blood and it consisted of a thousand lives, but I most humbly crave your Honour not to place me in any small ship, nor bark, nor pinnace but in some good ship and well appointed and well manned and other

[27] 'Will wee nil wee.'

good provisions for warlike affairs, shot and powder especially, for that I had rather to lack victuals than warlike provisions, by which means I shall be able and by God's grace to perform some good service as well as some others. But being put into a small and a weak force, as I am, I shall not be able to perform nor do any good service as I would do, and so in effect I were better not to be employed then to be employed to my discredit to carry victuals. But in all Princes' service I have evermore been a man of war and in good credit, but now I see younger men of service, for some have hardly been at sea before but they are employed in some of the best ships; had my most honourable friends lived I had been placed as well as some others, who were wont to place me in their own ships, willing me to dispose of them at mine own pleasure, for now I find I lack honourable friends.

13. To wet their Sails to prevent the Enemy's Fireworks or Fire, and to have provision of Water in butts and hogsheads in readiness aforehand to extinguish Fire by whatsoever occasion may happen.

That every good ship do wet some or the most part of their sails in due time before we do come too near the enemy, to prevent the firing of our own powder being in fight by any misfortune; and for doubt of the enemy to shoot or cast fire into our ships or sails (which God forbid), which being prevented beforehand may avoid great dangers that otherways might ensue. And also that every ship is to have good store of butts sawn asunder, or hogsheads, or barrels, filled with water in a readiness standing in several places in every ship within board and also great spouts of brass and skeet vats to cast water, and good store of buckets or quarter cans, yea, rather than fail, boats filled with water or wet gowns or mantles wet to the extinguishing of fire if it should so happen, which God forbid.

14. Every ship seeing the Fight, and he deferring to come in Thereunto, to be examined

whether he would not or durst not. In the first to be taken for a Traitor, and in the second for a Coward, and to be punished according to the quality of their Offence.

If any ship or ships, barks, or pinnaces and appointed to this present service and do not come into the fight, and if it be possible that he or they may come when his or their Admirals or commanders or his other fellows being in fight, and that he or they do delay or idle out the time and come not in presently to the rescue of his fellows, that the offenders in these base cowardly causes shall be examined upon these points, first, whether they would not fight or durst not, and for the first he is to be taken for a traitor and so punished, and for the other because he did not fight when his fellows did he is to be accounted a mere base coward; so as captain, or master, or any other officer, soldier, or sailor which withdrawing themselves from the service they to be dismissed of their rooms and offices and further to be punished as the quality of the offence doth require, and not to use as *in diebus illis* these old cowardly excuses, (God forbid), *I should, or we should, bring her Majesty's ships to any dangers.* This is but a bare cloak to cover a base coward withal and it is not to be tolerated nor pardoned, and if you mean to have good service done as it ought to be, for her Majesty's ships are made of purpose for the defence of the royal realm, yea and they must be adventured as occasion shall serve and by good advice and not rashly nor unadvisedly without skill, but to the honour of God, her Majesty, and defence of this royal realm, and not to put off nor defer nor shift of the service of greatest importance and to trust to the handling of the poor merchant ships, which have not such good batteries nor of such force nor continuance as her Majesty's ships have, for ten of her Majesty's best ships they are able to endanger or overthrow 200 or 300 sail of merchant ships, so in effect if the best ships should quail or give over, or not come near to the enemy's to fight. Which if they do not it would

altogether discourage the smaller and lesser ships for that time, they seeing her Majesty's ships giving over the fight, which if any such offence should be committed with any base cowardly withdrawing themselves from the service, these offenders in these causes they are worthy, and if he run away, to be taken and his four quarters to be made fast to four or several ships, and they hoisting up their sails, and so is to be drawn in pieces by them or else some other extreme death by torture. And also if any man being forward in this honourable service and deserve well by some valiant act so done by him he is to have some honourable reward to the great encouragement to all others to do well also.

15. That every Ship have iron Grapeners and good chains of Iron to them and iron bilboes for Trespassers. And every merchant's Ship to have a kedging Anchor and 200 or 300 fathoms of good Warp for saving ships, men, and furniture.

That every good ship and bark have good grapplers of iron with long chains to them to the intent to grapple the ships together if need shall so require. And that every ship have a pair of iron bilboes to put in prisoners or other disordered persons and to punish the offenders and to nourish the well doers, and that every merchant ship appointed to this service to have a good ketching anchor and 200 fathoms of warp to the same anchor to save the ships, men, and furniture. That there be made a general survey of all the merchants' ships of this service as touching all the furnitures in general, and that they have good, sufficient, and strong boats and good, sufficient, and strong oars to every ship or bark for the saving of men and ships, and that every ship have two or three good pumps in them aforehand and in due time to the intent that if they should be shot under water by the enemy or beat upon the ground, and so do make themselves leak, the many pumps may save the ship with all her warlike necessaries. Also this surveying to be taken aforesaid

they must be men of good judgement and knowledge in these causes and also men of good credit, for that they must not be partial nor to favour any, for if they do they may do much harm and greatly weaken and hinder the service. And these men must be appointed by the Lord High Admiral and they ought to have his warrant for the same accordingly, or else they cannot perform this service as they ought to do, for without a warrant resistance may be made by the owners of the ships against them in taking of this survey, answering them we have enough of all things where in truth they have too little of all things, which must not be suffered. And that all these merchants are not to have any smaller ordnance then sakers or demi-culverins or such like, for that a musket is better than any small cast piece.

16. Having direction from the Lord High Admiral, and shall wilfully forsake the Fleet, shall die for it.

And also that every ship, bark, and pinnace shall have some direction from the Lord High Admiral where they shall find the fleet, if that by misfortune or just occasion, against his or their wills he happen to lose company by night or foggy weather or by foul weather, storm, or by any encumbrance whatsoever, notwithstanding he or they shall diligently use all his and their good endeavours to seek and to find the fleet again with all speed possible they may. Upon pain of death for that in flat refusing, or going away willingly or wilfully upon purpose from the Lord High Admiral, or his or their Admirals or commanders whatsoever, without special leave given for the same, for otherwise it is to be accounted but flat disobedience or petty treason in the offenders. And these offenders to be most extremely punished, and not to be tolerated nor forgiven for encouraging of others to do the like odious offence which may not be suffered, for I have seen in foreign service great commanders executed for this offence aforesaid, and especially base persons are not to be pardoned but extremely punished at the least.

17. By examples of other Princes to put her Majesty's or any other of the greatest Ships into Frames of round, smooth, and straight masts to keep off the Enemy from entering the same; to be 6. 8. or 10 feet long from the Ship, being a principal Advantage to our ships to sink the Enemy, and no hindrance to our Ships or ordnances or the tackling as they may be placed.[28]

May it please your Honour to consider of this article following:

If it may please your Honour to think good of this motion to the great strengthening of her Majesty's Navy, as other Princes have been enforced to do the like, that is to say some of the greatest ships and some of the others to be put into frames made of straight and smooth round masts, not very big but reasonable, and the frames to be made in this sort, viz. from the forepart of the forecastle on the one side and so all alongst and round about the poop also, and so all alongst the other side up to the forepart of the forecastle also, and that there must be made round holes through the ship's side no bigger then the end of the mast will go in close and straight to fill the holes, and the ends of the masts must be made fast down to the deck or overlops; but you must remember to place the ends within board, just between your great pieces, for hindering of the traversing of them in the time of service. And the long masts, which must make the frame without board, and they must be made fast to the ends of them without board and fastened with strong plates of iron made of purpose, or else with bolts, rings, and forlocks within board and without also; and your frames may be in length without board 10 or 12 feet long, or longer or shorter at your pleasure, but the King of Denmark, in his ships, their frames were eighteen, four and twenty,

[28] This is given by William Bourne in his *Inventions or Devises*, London, 1578.

and thirty feet long without board, but in my opinion they were too monstrous long, but within board the end of your mast may be as short as you shall think good. By this policy 200 men shall be able to hold out a thousand men, yea, two thousand men, and also the enemy lying in this great danger so near to our great ordnance, and they being not able by no means possible to make entry for the frames, and we may easily sink them or spoil them in short time; and these frames will not hinder the tackling of the ships and you may take them off and on when you think good. I have seen the King of Denmark enforced to do all this or else the King of Sweden would not have left him not one ship, and if he had lost his navy he had lost his kingdom also, for the King of Sweden his ships were more in number and bigger, and much better manned with abundance of all warlike furniture and munition of great copper pieces which shoot a hundredweight of osementes[29] or shot at every shot, and everyone of his good ships were made of saker shot proof above in their cageworks, and between wind and water of cannon shot proof to keep them from sinking, and they had also great murdering pieces of copper to scour their fights. Moreover the frames aforesaid are good to be used especially in the Narrow Seas if the great invincible fleet of the Spaniards do come again, for the frames will make our Navy ten thousand men stronger than ever they were before, I mean if all or the most part be put into frames of our men of war here present at home, for that the frames are not to be used in far and long voyages except you will bestow them in your ships some part within board and some part without, the longest lashed without board, and when you come where your enemies be you may soon put them out for your defence but it will be troublesome to carry.

18. To have small iron chains for Nettings over our fights to avoid as well the Enemy's fire as misfortunes in our own Ships, and chains for

[29] Osmundes—bars or pieces of Swedish iron.

the Waist, and provision to make bulwarks, also false trap-hatches and scuttles, and boards with spikes, and sharp nails; also trains of Powder closely laid, well covered until time serve, and also the Tops to be armed musket proof with dry salt hides or popell[30] boards of six inches and other things, with crane lines and bags to hoist up great Stones to be from the Top cast down into the Enemy.

If it may please your Honour to have the old fashion as in the time of our sovereign lord King Henry VIII[th], his ships had chain nettings of iron over all their fights, for that small rotten rope netting being soon set afire by the enemy's casting or shooting of fire into us, or by any misfortune of fire as by wilfulness in setting our own powder afire, these rotten rope nettings being once on fire there will sparks of fire remain in them a long time. Which by misfortune may happen as aforesaid while our gunners be thus carrying their powder to charge the great ordnance, which being afire may endanger the ships, but netting made of iron no fire can remain in them not to the hindering of the service, nor the enemy cannot cut nor break them in his entering into us. If the netting be made of ropes they ought to be of a good great scantling to hinder the enemy in cutting of them to make his entry down, whereby he is the easier subject to be slain; and so that the same nettings of ropes or chains ought to be set up with pulleys and lines and crofeet[31] to let fall in the time of need, and that there be chains and waist cloths for the waist of the ship to shadow our men, and good store of provisions to make good bulwarks for the safeguard of men, and that there may be trap hatches, false pins to fall and to fold any way to deceive the enemies, and boards filled full of sharp spikes or great nails sharp at the point, and these boards be trimmed and made fast without board in the upper cageworks, or in any other part of the ship, or

[30] Poplar. [31] Crow-feet.

upon the poop or over the fights according to the necessity of the time to prevent the enemies in their entering and to endanger them when they be entered. Always provided you must keep going all your necessary weapons as small shot, long pikes, short pikes, bores,[32] spears, murdering pieces, yea, and come to the very sword and target itself to fight, and if not this then small trains of powder to blow them overboard, which will adaunt and amaze them much, in such sort and being ready laid before the entering of the enemies into your close fight, and with other fireworks also, and with a good resolution and manly courage and by good foreknowledge and skill, these last practices of all shall easily repulse the enemies, this being to them all extremities. And also in [if] these trains of powder be wisely and discreetly handled it will not endanger our ship nor ships at all, and that our tops may be made of musket shot proof with dry salt hides, old junks of bass cable, targets of proof, or pople boards of vi or viii or xii inches thick, the boards being old and dry they will be very light; or else to take wool bed mantles, gowns, and other things fit for the purpose, and also to have crane lines and bags to hoist up great pebble stones or other great stones, or great round shot there is none better, and to cast them down into the enemy's ships out of our tops which will break down their nettings, or decks, or spar decks, or other fights and endanger their men, and also these be good to cast down into the galleys, or barks, or pinnaces, being aboard of us, which also will endanger to sink some of them being but small and low under us. And also in our tops we may place such small shots[33] as we shall think meet for the purpose which will annoy the enemy, and if all things be done as aforesaid and made ready in due time and especially aforehand, for being too late we shall be prevented of our purpose for that it may be the enemy may come aboard of some of our ships willy nilly[34] perforce,

[32] Captain John Smith includes 'bores' in his list of weapons (*Seaman's Grammar*); the word is not given, in this sense, in the *New English Dictionary*.

[33] Small arms men.

[34] 'Will we nil we.'

and despite of all that we can do to the contrary and finding us unready. So take this of me, Captain John Young, and if ever you mean to build upon a sure foundation in these warlike affairs for your sure security and credit then do you never delay nor defer any time, being in danger of your enemies, but to make ready with all speed possible you may before you come too near them, for by their great force they may so amaze your men that you can in no wise possible be ready in that good sort but rather to forsake the fight before you come at it being unready to your great shame and discredit. Whereas, otherways, you being ready armed you shall at your own pleasure prevent the enemy, so fast bind fast find, this is an old warlike custom. All this and much more have I seen come to pass by careless working and wilfulness, yea, and the men of war taken also.

19. A general and distinct Declaration at large of the Strength with provision and well manning of this supposed Spanish forces; and also how we ought to have our Ships thoroughly manned and provided against the Danger that might ensue.

These news came of this supposed fleet which is the cause I drew this article.

May it please your Honours that the supposed three hundred and thirty sail of ships, and galleys, and galleasses, and they being men of war, it is an invincible fleet which heretofore her Majesty's fleet did never meet with the like force until the year of our Lord God one thousand five hundred four score and eight, at which time God did most wonderfully defend us, and our ships were manned and provided for as the accustomed use aforetime, when they indeed did meet most commonly but with merchants' ships but weakly manned and easily appointed, and commonly they were laden ships which was the worse for them. But as aforesaid this supposed fleet of Spanish enemies it is of a greater force, as by proof hath been tried at their last being here, for our

navy of ships were better to fight, or subdue, or bring in two thousand of merchant ships, being strangers as aforesaid, than to vanquish or beat back the men of war aforesaid, for that their ships many of them are of saker shot proof above water for the safeguard and safety of their men. Also their ships have so many men in them that they do but use the fourth part or sixth part or eighth part at one time most commonly when they do fight, for that they do allow for every two ton three men, so do all other kingdoms and especially when they go a warfare but we only alone which [35] is the cause that we sometimes thereby do want our purpose, and when it doth so fall out it is for want of men and especially shot and powder; but by their well manning they make themselves so strong, having such abundance of soldiers and sailors and great store of muskets, calivers, and abundance of armours and all other warlike furnitures whatsoever. May it please your Honour to consider of this point only; for look which party, friend or foe, whatsoever they be, they or we, having most store of good ships and men and greatest store of artillery and muskets and small shot, and especially greatest store of shot and powder in every ship, and also great store of pikes, long and short bores, spears, swords great store, pistols and long dags with arrows, calivers and muskets great store, armour and targets great store, metal balls of brass, and fireworks great store, with many other warlike necessaries and great abundance for store in every ship, for that furniture in the time of service will decay which is the cause that I do require this great store of furniture and men in every ship, for look which party, and having as aforesaid, he or they which hath the greatest provision he hath the greatest advantage in the end to overcome his enemies by all likelihood. But God doth give the victory at his will and pleasure as we have seen by experience already, but in my simple opinion if our ships though they were reasonably well manned and, by pardon be it spoken, yet if they had been much better manned and better provided, I mean of powder only, which if we had

[35] *Sic.* Cf. *ante*, ii. p. 252.

good store that then our ships had made a greater and better spoils of the Spanish fleet at their last being here than we did. Benignly, now and in good time aforehand, and that need do require it to make such a most honourable and worthy provision of men and shot and powder especially, and all other needful necessaries as aforesaid, and that also her Majesty's own ships, especially, be made above water and in their cageworks of musket shot proof for the better security and defence and to save poor men's lives and limbs also, which would be a worthy act and a most honourable and a most merciful act done, and also a most wonderful great strength for the safety of her Majesty's own ships and a great encouragement to all the whole companies that do or shall go in them. And also that there be no just cause to be found to complain as *in diebus illis* for want of any warlike furnitures whatsoever, and that it be not to be said would to God that we had had all things necessary for our defence and then we had not come to these dangers, or disgraces, or dishonours with these our enemies, and so repentance come too late, (which God forbid) that it ever should come to pass for want of needful necessaries as aforesaid. And I, poor Captain John Young, in all humility crave and desire even for Christ's sake, her Majesty and in all your honourable consent unto the full security and defence of this royal realm and our lives and liberties, and to all our good and safeties which God long preserve to His glory, and God cut off our doubted [36] enemies, I mean the Spanish forces, with fire and brimstone or some other malady.

20. This old sure warlike Note doth suffice to take a Purchase, though it were amongst a great many of Enemies, in doing as this Article sheweth, so neither unskilful man nor Coward can perform this nor divers other aforesaid.

And if any of the enemies' ships do board any of our ships and the enemies being a good distance from his own company, and though our ship be too weak, yet let us in

[36] Valiant, redoubtable.

our ship be sure to grapple and make fast both the ships together, and so to let fall an anchor or two and to take up a bitter of your cable and make fast the end to the mainmast, and so to bring them both up to a bitter to ride; and if you let fall two anchors you must take up two bitters of your cables for losing of your anchors, and also to bring both the ships so made fast and being come to a bitter to ride; and if it be a leeward tide[37] and you to windward of the rest of your enemies, which is the better for your own safety, and it will amaze this enemy which is fast aboard you as aforesaid for that some of our own ships having sight of this they will come in to rescue you. But if the enemy do resist and make his entry into you, and if you be too weak and not able to hold him out for entering into you, then your men must keep your close-fights with such needful weapons as is necessary for this purpose. And if all this will not serve your turn then you must take divers sorts of fireworks if you have them, if not then you must make small trains of powder, one after another, which will much amaze them and so plague and punish them to their utter overthrow, and it will do us no harm at all, if it be wisely handled, but to win time until our rescue may come in to aid us, for I have seen this practice and policy come to good effect many times. But to do this service they must be men of good judgement and of good courage, for the base cowards they dare not do this desperate service, and the unskilful man without knowledge he may set fire of all by his wilful working, for it is a greater eye sorte[38] than a danger being wisely handled as it ought to be.

God save and preserve our most royal Queen in long health with triumphant victory over her enemies.

And concerning these notes written aforesaid I have left unwritten many more for brevity's sake. And also I have not set down no kind of order concerning our boarding of any other shipping because it would be very tedious, nor yet the handling of the division of any prizes or pillages taken from the enemy, for that all these would contain

[37] Wind and tide in the same direction to leeward.
[38] *Sic.* Qy. assurity.

a great volume which for brevity sake I do omit. But always at your Honour's commandment I am ready in all humility, benignly craving pardon for this my boldness, poor captain

S. JOHN YONG.

S. Lawrence Poulteney's Lane in London, near to the old Swan.

Endorsed, 'prob. June 1596.']

APPENDIX C.

State Papers Dom. Eliz. ccxxxiv. 43.

SUNDRY ABUSES COMMITTED IN HER MAJESTY'S FLEET AND NAVY IN THE EXPEDITION UNDER SIR MARTIN FROBISHER, A°. 1590.[39]

When mariners and sailors repair to Chatham to be shipped such as are most fittest for the service, through sinister practices, procure themselves to be released, placing others very insufficient. In comparing the indentures from whence they were prest, together with the musters taken after they are shipped, the abuses will easily appear. Such like men commonly are busy headed and procurers of mutiny.

In shipping where 250 are allowed (by this means) the whole labour dependeth upon 80 helmsmen, the residue commonly know not their labour; for myself have seen amongst the like number above 40 boys, 40 that ship themselves for sailors and prove new, besides soldiers and officers who are not to be commanded to labour.

Divers sailors ship themselves for soldiers because they will not take their turn at the helm but at their pleasures. This precedent others will follow if it be not remedied.

Some sailors will plead simplicity to the end they may be discharged. If certificate were made unto her Majesty, orderly, of such sufficient numbers as the realm affordeth the Navy would always with facility be really manned. For always, when there is commission to press, the officers of such places giveth notice to the most sufficientest to absent themselves for the time.

[39] See *ante*, i. 250.

Captains oftentimes, upon some liking considerations, discharge very able and sufficient men, filling up the numbers with steale shares.[40] This breedeth grudging amongst those that remain, upon whom all the labour dependeth, because there is no difference in their pays.

Amongst 250 there are only 30 gunners, and not above six able for the place. All these refuse to do any labour from their calling. For, when a captain hath commanded them in time of need, they have detained him in their gun-room prisoner until he hath yielded unto their sea orders.

Such like gunners have made about 50 great shot unto a ship of 160 tons within musket shot in reasonable weather and have not hitten the hull twice.

In taking of a prize of small value, where their shot hath not hitten the hull, there hath been allowance made of 700 weight of powder where 300 weight was never spent.

Such like gunners used to sell powder by the barrel to maintain their idle lascivious expenses.

The custom is that the gunner hath all the scaling powder. There is not any of her Majesty's ships that hath 30 great pieces of ordnance but the scaling powder is worth xx lbs., for against that hour the gunners will lade them to proof.[41] In this last expedition this powder thus allowed for, or fee, standeth her Highness in ct lb[42] at the least.

In shipping where 250 are allowed commonly there are not above 160. Nevertheless allowance is demanded in victuals and pay for the full number. Whereby her Majesty is deceived, in every such proportion about c lbs. *per mensem.*

[40] Qy. 'stolen shares.' Whatever the verbal doubt, the meaning is plain, seeing that we know from other sources that it was not uncommon for some captains to discharge men and share their pay with the purser, master, and gunner (*Harl. MSS.* 253, f. 6).

[41] *I.e.* instead of using a small charge for scaling, the gunners use a double proof charge of powder or pretend to do so.

[42] 100 lbs.

Besides that which is gained upon the sailors extant,[43] for the cask (wherein beer is) wanteth upon every butt xx^ty gallons in bigness, yet two of those pass for a tun. Beef and biscuit likewise so bought under her Majesty's rules, and such as hath been before to sea.

Where shipping want of their full numbers of whose men, often slender service is done, fearing thereby to hazard the Queen's ships if men should be lost. In this case some have refused to fight alleging they are too far from home, if their men should be slain or hurt the ship were in danger of losing.

In July last one of her Majesty's fleets, near unto Cape Finisterre discovered the Spanish navy bound from Lisbon unto the Groyne, laden with victuals and munition, wafted but with four flyboats, being not above 5 or 6 leagues distant ; some of her Majesty's fleet was in sight of them but encountered not with them. The Admiral of her Highness' fleet, upon notice given him that night, determined to fight the next morning, and thereupon hanged out a light all night commanding his fleet to follow him. The Spanish navy bore next hand from them vii (?) east north east, and the Admiral shaped his course south south west.[44] It was said the next day (when some found fault) if they meant to have fought with us they might have followed by the light etc.[45]

About the five of June last,[46] sundry prizes were taken upon the coast of France, whereof some were Easterlings and others Newfoundlandmen, whereof the Admiral of her Majesty's fleet gave one laden with fish unto a kinsman of his ; out of every such prize the captains that take them, and the masters and officers in the Queen's ships, have had their accustomed fees as ordnance, powder, cables, anchors, sails etc. And the company no more than shew bare pay, with extraordinary deductions.

Before the fleet departed for the Islands there was

[43] Publicly seen and known.

[44] Marginal note—'Not likely in that course ever to meet together.'

[45] Marginal note—'A base excuse.'

[46] See *ante*, i. p. 252.

treasure found in some of these prizes, which if it had been converted towards the better victualling of her Majesty's Navy, the service would have been more advanced.

Or if good husbandry had been used in spending of the victuals in the beginning, whilst they were upon the coast.

Coming from Queenborough to Plymouth some ships wanted 60 and some 80 men between May and the last of June, being six weeks before they departed the coast. Oftentimes were in harbour, where men commonly go ashore and spend no victuals aboard. Of their numbers divers times there hath not been aboard at a meal 40 men, nevertheless the whole allowance for the full number of 250, as the pursers and stewards allege, hath been spent. A great abuse where to one shall be allowed four men's meal.

It were very expedient that such as are not aboard at meal time (being not employed about the ship's labour ashore) should lose their diet and the same to be reserved for store ; in this manner four months' victuals upon our coast will serve three months longer.

I have seen a captain of her Majesty's ship take provision of wine at sea for the company, and after sell the same to his own use.

The like captain hath taken from two Frenchmen, off Alderne de Bergs,[47] coming from Lisbon in July last, as much silk as was worth a thousand marks and converteth the same to his own use.

Such like captain, with men and masters of her Majesty's ship and most of the company, carelessly bearing to shore when one of her Majesty's ships riding on an open road in (want of company), was in great danger of

47 Robert Norman (*The Safeguard of Sailors*, Lond. 1640, p. 25b) says ' Hee that commeth from Rochell outwards by the North Peretrees (Pertuis) let him not steere within 15 fathoms, and he shall not need to fear the Barges of Oldron for hard by the Barges you shall have 12 fathoms.' Alderne and Oldron are, of course, variants of Oleron ; Barges and Bergs are evidently the Basques, *i.e. basses*, shoals.

perishing in a storm, for the said ship knock aground; had not the storm ceased the ship had perished.

At such times, when officers of her Majesty's fall at variance, then in malice they discourse such abuses as are done and committed by them, *viz.*

Boatswains of her Majesty's ships receive out of her Highness store such necessary provision as appertain to the apparelling of the ship without indenture, and likewise their own account without farther testimony is accepted. Herein her Majesty is mightily deceived.

For the principal officers of her Majesty's store, being very well experienced upon the viewing of a ship's wants what will serve for supply, deliver unto the boatswain accordingly. And where a hawser to make shrouds is of a ct fathoms, often they deliver 60 or 50, and demand allowance of the whole because it is delivered without indenture. Thus is their proceeding in all things else.

If indentures were made between these petty officers then her Majesty could not be so greatly deceived, and the accounts of ship officers not to be allowed without the hand of the captain and master of the ship for the time being.

Principal Officers make large demands upon their accounts, especially in shivers of brass, where they last longer than the any ship.[48] And if boatswains were duly examined they would not affirm one lost in a voyage.

If pursers' books (which they reserve to themselves) for these ten years were compared with those which Principal Officers prefer to the Lord Admiral there would be above ten thousand pounds cleared unto her Majesty wherein her Highness hath been deceived.

Endorsements and address: Thomas Davyes Observations. 1590 (Dec. 4).

Thomas Davies report to Mr. Ralph Lane of the abuse in her Majesty's shipping lastly with Sir Martin Frobisher.

To his worshipful friend Mr. Ralph Lane, at his lodging in the Old Bailey give these.

[48] *Sic.*

THE FOURTH BOOK.

To all Manner of Mild and Temperate Men that are led by Reason and not transported with Passion (like the violent sect of Puritans), wherein they shall delight themselves with the strange accidents of the Sea and new Discoveries and Colonies by Land.

In my first dedication I recommend the reading thereof to my dearest and most intimate friends, in the second, to the Captains and Commanders serving in the late wars against Spain ; in the third, to all sorts of seamen, from the highest to the lowest. And in this I prohibit none but the perverse Puritans, whose stomachs are so faint and feeble that any praise that can be attributed to a Spaniard or Papist will make them sea-sick and cast their gorge.

I will therefore make a Turk judge in this case betwixt the Spaniards and them, because no Christian but will incline to favour one sect more than another. Could God ever give a greater blessing to man than to enable him to win and gain the souls of them that had been led away in infidelity and blindness ? Could he ever shew a greater worldly happiness to a kingdom than to send them, as it were out of a cloud, a New World

that affords all blessings and riches? Could he ever give more honour and reputation than conquest over these people and their land? Could he ever shew more love to his servants than to discover those countries at the time the Moors and Turks infected and infested the countries of Spain and Hungary? Could he in any thing more shew his wonders than by such miracles, as are related and recorded, for the means of the conversion of those people? This shall suffice for the will of God and force of His power; but as God chose the Spanish nation, for some secret judgement of his own, above all other people to spread forth his Holy name, so do I observe three things in them worthy of reprehension:—the one is their ingratitude; the second, their cruelty; and the third, the base condition of the people that were the authors of their prosperity.

Their ingratitude appeared towards Columbus, a man of more desert to the Christian world than any other ever God created. For all the good before mentioned was wrought by God's permission and his pains and patience.

This man, after his desperate and fortunate attempt, was maliciously sent prisoner in irons to Spain to answer the calumniation of his soldiers, which was not all, nor the worst; for this was an offence only to his body, the other to his honour and reputation.

For the Spaniards to eclipse his honour, glory, and merit for discovery of the New World, on no other account but his being a stranger, born in Italy, invented and devised many fictions and idle imaginations to lessen his praise. One while they say he was led to the discovery by a Spaniard that lay in his house upon his return from the Indies and taught him the way thither. But

they could never agree upon the Spaniard's name, what province he was of, where he arrived, or what befell of him. So it is evident all were false aspersions, invented to lessen his honour and advance the supposed Spaniard's praise. And God justly sent the divisions afterwards in Peru amongst themselves as a punishment for their ingratitude to Columbus ; for an unthankful man incites God to punish, and man to abhor, him.

The second was their cruelty to their poor conquered Indians, occasioned principally out of lucre and gain, which bred such a revolt in Peru as had almost hazarded their whole enterprise. But their tyranny being made known in Spain, the Emperor, like a merciful and pious prince, prohibited all rigorous courses against the silly savages, which so enraged the conquering Spaniards that doubtless, had they bordered upon any civil country that could have given them assistance, they would as well have spoken any other language as Spanish.

My third observation was the quality and condition of the commanders in the conquest of Peru, the principal whereof was such as no man would own as his son, nor they challenge for father ; their education like their birth, neither being taught to write nor read. And yet daily practice brought Francisco Pizarro to a civil familiar behaviour, and Diego de Almagro to a vain-glorious and high carriage.

What these two wanted in birth and breeding was supplied in valour and industry. For to speak truly, considering what they attained to by their excessive travail and labour, the condition of the people they were to govern, and the multitude of enemies they subdued, no history, ancient or modern, can yield more honour to conquerors

than they deserved. And I am of opinion that the cruel usage of the Indians proceeded from the deboistness and baseness of their soldiers and followers; for their enterprise in those days was not undertaken but by desperate persons of estate and life, that thought nothing well gained that was not unlawfully gotten. I may the rather confirm my opinion because Hernando Cortes, who was a gentleman by birth, and so famous for valour, government, and wisdom that he was paralleled with Marius and Scipio in the Roman State, carried his affairs with that honour, discretion, and mercy, that he left, and there still remains, the title of a Marquis to his house, when neither of the other two had ever lawful child to descend from them to uphold their names or memory.

The exploits of the Portuguese were no less memorable and victorious than the Spaniards. But seeing they are now both one nation, and live but under one King, and that the ensuing discourses will speak their praises more than their pity, and attributing their many crosses to the just cause, I will say little.

The Portuguese nation had been famous ever since the victorious battle of Ourique, obtained by Dom Affonso, the first King of that country, in the year 1139. Since then they have held competition with Spain, especially of late that God made them famous in their eastern conquest, and so increased their wealth that the cruel and miserable Jews, who set their whole felicity in worldly riches, encroaching among them have mingled with and infected their blood with that cowardliness and covetousness that it may be justly judged they truly deserved God's ire and wrath cast upon them. For in two years, betwixt 1578 and 1580, God sent

them for their punishment and scourge four Kings, and five governors that might be accounted Kings, that spent and spoiled the wealth of their country, Dom Sebastian by his rashness, Henry * by his want of resolution, Antonio by tyranny, Philip by arms, and the governors for their private advantage.

Since those years the calamity that has befallen them is lamentable, by spoils and rapines committed on them by sea in the late wars with England. And, since, by the loss of their trade in the Indies, which was the first cause of their renown and the first enriching of their State. They must impute their misfortunes to God's punishment for their joining and conniving with Christ's professed enemies the Jews, for their own particular ends and gain.

It is written of Peru that the constellation under which it is placed caused so many divisions and slaughters as were there committed, not only in the time of the Spaniards but many years before.

The like may be said of the Molucca Islands, though I rather persuade myself that it proceeded out of the divisions bred at their first discovery betwixt the Spaniards and Portuguese, that though the two kingdoms were in peace at home yet there happened continual encounters betwixt their subjects in those parts when they met there ; but the Portuguese had the better in those debates.

Not many years since the like quarrel befel the English and the Hollanders upon the like cause, and about the same unfortunate islands, where they had many bickerings notwithstanding the two States continued friends.

To conclude: I will concur with Charles V., the Emperor, who was wont to say, 'It had been better

* Cardinal, Dom Henrique, Archbishop of Evora, uncle of Dom Sebastian.

those countries had never been discovered, or at least not so much frequented.' For we have not only enriched the infidels with the silver of America brought into Europe, and decreased the trade and commerce to many of the civil and known countries of the world, as is apparent by the general want of money occasioned by this unprofitable traffic.

And now to the discovery of the several countries.

BOOK IV.

Which includes the Discovery of several Countries and the Enterprises of the Spaniards and Portugals in their conquests of the Indies, with other things to be seen in the Catalogue.

[EDITORIAL NOTE.—As it is evident that to edit Book IV by amplifying Monson's short notices into full and connected histories of political events, commerce, and geographical discovery would expand this single book into volumes, and as all the subjects contained in it have been treated by modern and authoritative writers it has, for the most part, been left untouched beyond the correction of names and dates where necessary. But in no case should it be assumed that the general statements made in the text are trustworthy; even when correct as far as they go they are nearly always incomplete or require qualifying considerations.]

The Discovery of several Countries and Islands.

BEFORE I treat of the discovery of either of the two Indies, I will take the Canary and Terceira Islands in my way, because they were known many years before the others. And in the next place for that there is a necessity for ships to see those islands in their navigations, the one in going, the other in returning, from the Indies.

The Canary Islands, which are seven in number, were conquered by the Spaniards in the year 1399, in the time of King Henry III. of Castile.

The Terceira Islands, being as many in number, were said to be discovered by the Netherlanders, but by whom by name, or by whom they were employed, or the year of our Lord, is not set down.

Guinea was discovered in the year 1470, in the days of Dom Affonso the fifth, King of Portugal.

The Cape of Good Hope, and a hundred and fifty leagues to the eastward of it, as far as the haven of Infante, was discovered by Bartholomew Diaz, in the days of King João II. of Portugal, in 1487.

Calicut, and the other places in the East Indies, were discovered by Vasco da Gama, in 1497, and in the reign of Dom Manoel, King of Portugal.

The country of Brazil was discovered in 1500 by Pedro Alvarez Cabral, upon the second voyage that was gone to the East Indies, in the time of Dom Manoel aforesaid.

The river of Plate was discovered by Amerigo Vespucci, in 1501, as he was going to find out a passage to the Moluccas, and employed by the same King Manoel. But it is rather thought that Juan de Solis, and not Amerigo, was the first discoverer of it.

The West Indies, and especially the islands of Lucayas, were discovered by Christopher Columbus in 1492.

The country of Bacallaos, *alias* Newfoundland, was discovered by John Cabot, a Venetian, by the directions of Henry VII. King of England, five years after the discovery of the West Indies.

The country of Florida was discovered on Easter Day, 1512, by Ponce de Leon, who went to find the island of Bainco, being told by the

Indians there was a well there that by drinking of the water it would make old men young.

The country of Panuco was discovered by Francisco de Garay in 1513.

The country of Yucatan was discovered by Francisco Hernandez de Cordova in 1517.

Nombre de Dios was founded by Nicuesa; the islands of Jamaica, Honduras, and many other places, were discovered by Columbus.

Darien was discovered by Ojeda and Nicuesa; where they endured many calamities, hunger, mutinies, and hurts.

The river of Amazons, and the river of Orellana, and all that coast, was discovered by Vicente Yañez Pinzon in 1500.

The South Sea, which was the happiest discovery of all others to the Spaniards, for that it led them to Peru which yields them all their treasure, was found by Vasco Nuñez de Balboa in 1513, a man in disgrace at that time with Charles, the Emperor.

The country of Chile was discovered by Diego de Almagro; and whether Lima was in the circuit of Chile or Peru, was the difference betwixt Pizarro and Almagro which cost both their lives and bred their ruins.

The country of Valdivia, near Chile and Peru, was discovered and conquered by Pedro Valdivia.

The cape of California was discovered by Pedro Alvarez in his voyage from port Navidad to the Moluccas.

Gonzalo Coelho was sent to discover a passage out of the South Sea, into our ocean, at the time when the question was betwixt the Kings of Spain and Portugal about the trade of the Moluccas.

The country of Cybola and Quivira was discovered by Francisco Vasquez Coronado; as also the country of Granada.

The Philippine Islands were taken possession of by Miguel Legazpi in 1565; he was employed by Don Luis de Velasco, Viceroy of New Spain.

The islands of Solomon, in the South Sea, were discovered from Lima, in Peru, by Alvarez de Mendaña, in 1567, and Pedro de Sarmiento, his lieutenant, (whom I knew).

The Straits of Magellan were discovered by Ferdinand Magellan, a Portuguese, in 1520, employed by Charles V. then King of Spain.

The Island of Madeira, short of the Canaries, was discovered by Robert Machin, an Englishman, in 1344.

Russia, or Muscovy, was discovered in the year 1553, in the reign of Edward VI. King of England. Sir Hugh Willoughby was sent upon the discovery, but he and his company perished in the harbour of Arzina in Lapland. Richard Chancellor, being captain of another ship, proceeded upon that discovery. Cherie island, in Greenland, was discovered by Stephen Bennet of London.

Julius Agricola was the first that sailed about England and Scotland, and was the first that discovered the islands of Orkney, which he subdued.

The Portuguese Discoveries on the Coast of Guinea, Castle de la Mina, and in the East Indies.

GUINEA was discovered, as you have heard, in the year 1470, and in the reign of Dom Affonso V. who pretended title to Spain by his wife Juana, called the Excellent. King João II. of Portugal, and the thirteenth in descent, imagined that the spices that came into Europe might be brought by sea, and hearing there were Christians in those parts of the world, both these things encouraged him to undertake the discovery.

Bartholomew Diaz, an officer in the storehouse in Lisbon, was sent from Castle de la Mina to discover the length of the land of Africa, and found out the Cape of Good Hope. From thence he sailed to the eastward one hundred and fifty leagues, to a port which he named Rio del Infante, and gave names to all places where he passed.

The King would not only rely upon his relation, but sent a Franciscan friar to find out the Indies by land; but the friar, for want of language, returned from Jerusalem. After that he sent two of his servants that were skilful in the Arabic language, the one called Pedro de Covilhão, the other Affonso de Paiva: they departed from Santarem the 7th of May, 1487, and coming to the Red Sea they parted company. Paiva went to Prester John's country, where he died: Covilhão travelled to Calicut, and other places of the Indies, where he informed himself fully and substantially of the whole country. In his return home he met

with two Jews that were sent from the King of Portugal to meet him, and to wish him to inform himself of the state of Prester John.

One of the two Jews he sent back with a relation of the state of the Indies, the other he carried with him to Ormuz, from whence he likewise sent him to the King, to give an account of his voyage, and himself went to Prester John, where the King, whose name was Alexander, used him courteously. But he dying, the other that succeeded him detained him prisoner, so that he never lived to return to Portugal, or to send more information to the King his master.

The King having information sufficient by letters the Jew brought him, he immediately cut down timber and built two new ships for that discovery in 1495, and the 25th of October. King João, in the mean time, died, and Dom Manoel succeeded, who added great fame to the kingdom of Portugal. He furnished the two ships aforesaid, the one of a hundred and twenty tons, and called her the Angel Gabriel, the other of one hundred tons, and named her the Raphael, with one caravel he bought, and one other to carry victuals. He appointed for General a servant of his called Vasco da Gama, well experienced in sea affairs: Paul da Gama, his brother, went captain of one ship, and Nicholas Coelho of another, both of them being the King's servants. Bartholomew Diaz was to accompany them to Mina, in Guinea.

* The 8th of July, 1497, he embarked at Belem

* This account of Vasco da Gama's voyage seems to be taken from the history written by Diego de Barros. Several other relations would have to be compared and used to reconcile conflicting dates and facts, therefore the editorial note at the commencement of Book IV should be borne in mind.

with a hundred and forty eight men: the pilot was Pedro de Alanquer, who had been pilot with Bartholomew Diaz in his former voyage, and if they lost company the place of meeting was in the island of Cabo Verde. They passed by the Canaries, and off the river of Oro they lost company for eight days in a storm; but met again at the island of St. Augustine, where they refreshed themselves for seven days.

The 3d of August, Vasco da Gama went from thence and left Bartholomew Diaz behind. The 4th of November he saw land, and called it St. Helena, supposing it had been thirty leagues from the Cape of Good Hope: the people in this place would have betrayed him.

The 20th, being Wednesday, he doubled the Cape: on Sunday he came to St. Blaz, being a watering place sixty leagues from the Cape. Here he stayed ten days, and departed the eighth of December; and in going to the river of Infante, he endured a great storm. Here he found gentle and civil negroes; one of his company could speak the language of the negroes; he named it Agoada da Boa Gente, and the river the Cobre.

The 15th of January he sailed along the coast, and met with negroes of great civility in their boats, who gave him light of the East Indies, and he called this river Dos Bons Sinaes. Here he stayed thirty two days to trim his ships, and erected a mark, which he called St. Raphael: the place was infectious and his men began to be sick.

The first of March he came in sight of Mozambique, where they were taken to be Moors and at first well used, but finding them to be Christians they would have betrayed them. Here they had news that Calicut was nine hundred

leagues from thence, and took in a pilot that had been there; which comforted them much.

The first of April they came to certain islands which they called Acoutados, because finding the pilot in a lie, here they whipped him, and he confessed he brought them thither to have cast them away, as also that he would have enticed them to Quiloa, making them believe that Christians dwelled there. In this course the St. Raphael struck upon a shoal and was miraculously preserved, and this shelf they called St. Raphael.

The 7th of April they came to Mombassa, where the people knowing them to be Christians, and what had passed with them in Mozambique, they practised to betray them.

They came to Melinde, eighteen miles from Mombassa, a city built like the houses of Portugal, the King a Moor, but courteous, and glad of the Portuguese coming thither; he furnished them with pilots to Calicut. And here he met with four ships of Christians of the Indies, who were wonderful glad to see them: those Christians gave them warning not to trust the Moors of Melinde. The King entered into friendship with the King of Portugal.

The 6th August they departed from Melinde, and crossed over the gulf, being seven hundred leagues, which they sailed in thirty two days and never saw land.

The 26th of August they discovered land near Calicut, and there they found a Moor of Tunis, in Barbary, who knew the Portuguese nation, and asked them, in the Devil's name, how they came thither? The Moors of Calicut contrived all treasonable practices they could against the

Portuguese, and so prevailed with the King that wars ensued betwixt them, and so continued a long time after.

They returned from Calicut, where they escaped great danger of treason, and in their way fell with divers islands where the people were willing they should erect a cross with the arms of Portugal: this place he called Porto de Santa Maria. He came to the island of Anjediva, where he trimmed the ship, and watered. Here was a spy sent to discover his forces, which spy counterfeited to be a Christian and born in Italy; but he was suspected to be as he was, and they racked him three times and then he confessed his villainy. The General carried this spy into Portugal, where he became a good Christian and gave great light of the affairs of the East Indies which stood the Portuguese in great stead.

Before they arrived at Melinde they endured great misery. And if God had not instantly miraculously succoured them, the General's brother and Nicholas Coelho were resolved to have returned to Calicut and put themselves to the mercy of the King. But at last they spied land, which proved the city of Magadoxo, fairly built, and inhabited with Moors, one hundred and seventeen leagues from Melinde.

The first of February they came to Melinde, where they were well entertained; and the King accepted of a pillar, to be set up in sign of friendship with the King of Portugal, and sent an ambassador thither.

The 17th of February they departed, and the 20th following they burnt the St. Raphael for want of men, and took the General's brother out of her.

The 20th they came to the island of Zanzibar,

where the King used them courteously, and from thence to Mozambique.

The 3d of March to the islands of St. Blaz; the 20th they doubled the Cape of Good Hope, and then sailed to the islands of Cabo Verde, where the General's brother fell sick and hired a caravel to carry him to Portugal because his own ship was weak and leaky.

Before his arrival at Cabo Verde, Nicholas Coelho willingly lost his company, that he might carry the first news to the King of his discovery of the Indies, and came to Cascaes on the 18th September, 1499.

The General came to the Terceiras, where his brother died; and in September to Belem, where the King did him great honour, and made him Earl of Vidigueira. He gave him the royal arms of Portugal for his escutcheon, at the foot whereof were two doves, alluding to his name Gama.

In his second voyage he went General of thirteen ships and two caravels. He was most fortunate in that voyage, and discovered many lands and people that afterwards proved both wealthy and profitable to the Portuguese by their trade.

Betwixt his first voyage and this second there were two others. The General of the one was Pedro Alvarez Cabral, who departed from Lisbon the 7th of March, 1500. In his way to the Indies he discovered the country of Brazil in ten degrees, and sailing to the southward, in seventeen degrees and a half he came to a harbour which he called Porto Seguro. Cabral, upon this discovery, sent a pinnace to the King to inform him of it, which at this day is more profitable to Portugal than the trade of the East Indies.

Cabral, the 29th of May, setting out from

the coast of Brazil, was taken with the most violent storm that ever was read of; the day seemed to be as black as night, the sea to burn like fire. Four of his ships were swallowed up in the sea, and Bartholomew Diaz, the discoverer of the Cape of Good Hope, in one of them.

The unlucky entertainment in Brazil made after amends to the Portuguese; for at this day their sugars, and the wood of Brazil, yield them more profit than the precious stones, spices, or other merchandizes of the East Indies. The first inhabiting of Brazil was with small charge and adventure, and a desperate undertaking which they put the worst kind of people to inhabit and take their fortunes in, rather to be banished for offenders than with any hope of profit that should accrue unto them. But the country proved so plentiful and rich, that although they have received great detriments by the Hollanders who for a time possessed Bahia, one of their chief places, and at this day * hold Pernambuco, yet it will quickly be redeemed again by peace and trade.

* The Dutch held Pernambuco from 1630 until 1654.

Some other Particulars concerning the East Indies.

1. BEFORE I treat of any particulars of the East Indies give me leave to put you in mind of some observations of mine, which will not be unworthy your perusal seeing they are to be attributed only to God, who is the searcher of all hearts and the discoverer of hidden secrets.

2. Let me put you in a maze and marvel that, out of so many flourishing nations as God hath created and civilized, he should elect and choose the kingdom of Portugal to perform this great work of his, a country in those days of less esteem and reputation, of less renown and fame, and of less ability and valour, than any other Christian monarchy we can call to mind. And to assign them such a time to effect it when they enjoyed a happy peace with their neighbours, and had no enemy to oppose or hinder their designs.

3. The first discovery, as you have heard, was to Guinea, in 1470, where nothing appeared to the Portuguese but barbarous blackamoors and negroes, a strange and unseen sight to them, and not to be believed at their return if process of time had not made it familiar to us by after-traffic to confirm their report.

4. This discovery gave the light and way to all others that ensued upon it, as shall appear like an art begun that others take from one to another. But we must confess that the Portuguese,

to their honour, were the first breakers of the ice to give passage to all other strange countries. And as Guinea yielded a complexion to their people that differed from us as much as black from white, so did America, which was not long after made known to us, produce a sort of people differing from the Europeans in whiteness and the Africans in blackness, but a mean betwixt both and a colour like an olive. Which, to as many as have seen it, seems strange considering that Guinea and America lie east and west, all in one parallel, so that in reason there should be no such difference.

5. This change in complexion, and the plentiful increase of gold in those climates, is attributed both to one cause, which is the heat and operation of the sun. And, in my opinion not improperly, as may be gathered out of the ensuing reasons.

6. The sun rising to the eastward, betwixt the two tropics, runs her course westward over Asia and Africa till she comes to the Ocean Sea, in which circuit her extreme heat engenders the delicate metal gold, and changes the complexions of creatures to a black hue, which the heat reflects from the earth.

7. Coming to the ocean aforesaid, she passes the distance of 8 or 900 leagues over the air of the sea and is cooled by it, as she was formerly heated by the land, that by the time she draws near the continent of America she hath lost great part of her vigour and force, and not able to produce that effect as in Africa. And therefore is not able, as it were, to mellow the earth and make it become gold, as after she does when she hath run her course the breadth of America, where her heat again ripens that matter and

substance of gold. For we see by experience that the greatest quantity of gold is sent out of Peru into Spain, it being the westernmost part of America, when the eastwardmost part thereof, as Guiana and other places nearest us, never afford gold; and this for the reasons aforesaid as I conceive.

8. But to return to the discovery of the East Indies: I will recite some particular blessings and benefits that God hath poured upon the world in general, upon Europe in particular, and upon the Portugal nation especially. For as they were the first discoverers, to their immortal honour, so all attempts by other nations, in other countries, must be attributed to them as a people that trod out the first path for others to walk in, as I will shew by reason hereafter in this book when I come to treat of it.

9. This eastern discovery has resolved one doubt that no ecclesiastical or modern history could do before, which was the life and martyrdom of that holy apostle St. Thomas, as the monuments there make it manifest, and as a remnant of some Christians in those desolate places gave an infallible testimony.

10. And whereas, in continuance of time, many errors were crept in amongst those silly Christians inclining to the Greek church, yet by the pains, travail, and danger of life, the Portuguese have brought them to the light of the truth, and have since increased the flock so abundantly that the name and true worship of Christ is propagated in the uttermost parts of the world, yea, as far as China and Japan.

11. By the eastern discovery the length of Africa is butted out as far to the southward as the Cape of Good Hope, and from thence to the

eastward as far as the Cape Guardafui. In which course we have found the Red Sea to fall into the eastern ocean, which before was not known to us in Europe.

12. By the eastern discovery, and our access to China, we have found out that guns, powder, and printing, were in use with them many hundreds of years before they were known to us western people. We may likewise add many other curious works, which to this day we cannot attain to the knowledge of or imitate them in.

13. By this discovery we have disproved that opinion of the philosophers, and other learned writers, who maintained the impossibility of inhabiting under the hot zone, for the excessive heat, which our daily voyages beyond the line have made familiar with us.

14. By this discovery we have authentically proved, by fact, antipodes, a thing before held ridiculous by many, *viz.* that one people's feet are opposite to another's, which, till Magellan circuited the world, could not be made plain.

15. By this discovery we found the two poles equal in their nature, and that the same effect the north star produces unto us on this side the line, the south does the like on the other side; but with this difference, that when it is summer with them it is winter with us, and when it is summer with us it is winter with them.

16. By this discovery we have found the strangeness of winds, to blow contrary to our climate, a thing not to be believed if experience had not shewed it: as, namely, the certain constancy of a wind to blow from the Canaries to the West Indies, betwixt the north and the east, and never to change. And then again, from the coast of Brazil towards the East Indies, as far as

China, we find a limited wind, certain in some places for three months and in others for six, the days of their entrance and change being known to all people. These are called the monsoons, but from whence the name is derived, whether before the Christians' access into those parts, I cannot find.

17. By this discovery we have found out strange and unheard of fishes. Amongst the rest, and of most wonder, is the Remora, whose nature is to stop the way of a ship, and to bring her astern, though the wind be strong and large to carry her forward.

18. This fish has been heretofore writ of, and looked upon as a poetical fiction till a voyage in a carrack to the East Indies put all men to silence. For the beak-head of that ship was clasped about with a Remora, to the fear and wonder of the mariners; for they found themselves by the height to be a hundred leagues astern of their ordinary course. And at last, finding the cause with labour and pains, they got this monster unglued, that in the end the carrack arrived at the port of Goa, where, for the memorableness and strangeness of it, this ship, the captain, the day it happened, and her arrival, are publicly pictured and to be seen to this day.

19. By this discovery we are come to the knowledge of many islands and rocks not known before, and some of them not above a quarter of a mile in compass, as namely, La Penedo de St. Pedro, in four degrees to the northward of the line,* all white, and like a sugar-loaf; the island of St. Helena, two miles in compass, healthfully seated, that yields plenty of water, fish, goats,

* St. Paul's Rocks in 0° 55′ 30″ N.

and fruits ; as well to us in our navigations from the East Indies as to the Portuguese in times past.* The island of Ascension, wholly barren, not affording so much as water. But the strangeness of these rocks and islands is that they are placed in the midst of the ocean, the nearest of them not being within one thousand three hundred miles of any main continent.

20. We are come to know the goodness and operation of the bezoar stone, and of the beast itself that yields it. The coquo of Maldivia,† and the strange growth of it upon trees five or six fathoms deep in the sea ; the virtue whereof far exceeds the bezoar stone.

21. By this discovery we have learnt many means for health by drugs, and choice things of Nature for man's body, the place of their growth, and the strangeness of them. We know the Abada,‡ a beast that has a horn in its forehead and is thought to be the unicorn : but this is the beast and this is the horn the other is reported to have, for unicorn there is none such as we paint them.

22. By this discovery we are now served with our spices, drugs, precious stones, and all other India commodities, immediately from thence by the shipping of Europe, which was wont to be received by the way of Turkey, at unreasonable prices and at the will of the Turk.

23. By this discovery the Portuguese have brought in and settled the Portuguese language, which is now grown familiar and frequent in those parts of the world. They have built many famous cities and towns, erected bishoprics, churches, and

* There is no MS. authority for 'as well to us . . . times past.'

† The Maldives.

‡ Female rhinoceros (Spanish).

monasteries. They have established temporal and spiritual laws, and the same form of government they enjoy and live under in their own country.

24. By this discovery they have found many strange Kings who govern their people with much civility, their towns and cities anciently built, their palaces of great majesty and pomp, and all things else answerable to their excellent policy, rule, and government.

The Names of the Towns the Portuguese have in the East Indies, with their Form of Government.

Sofala.
The Island of Mozambique.
The Island of Ormuz.
Diu.
Daman.
Bassein.
Chaul.
Goa.
Honawar.
Barçelor.
Mangalore.
Cannanore.
Cranganore.
Cochin.
Quilon.
Colombo, in the Island of Ceylon.
Negapatam.
St. Thomas.
Malacca.
Molucca Islands.
Ternate.
Tidor.
Banda.
Amboyna.

Goa is the metropolitan city of all the East Indies, lies in the country of Hyca Khan, and is an island twenty or thirty miles in compass, both pleasant and fruitful. The Viceroy resides in this town and the greatest bishop of the Indies is there settled.

The carracks arrive from Portugal in this port of Goa, unless they be forced about the Island of St. Lawrence, which if they be, they can fetch no

harbour nearer than Cochin, which is the place the carracks use to take in their lading in their return to Portugal. The winter in Goa begins the 15th of May with very great rains, and so continues till the 15th of August. And during that space no ship can pass over the bar of Goa, because the continual showers of rain drive all the sands together near a mountain called Agoada, whence they spread themselves over the shoals of the bar and into the port of Goa, whence they can find no way out, but continue there till the 10th of August, when the rain ceases and the sea scours the sands away again.

How a new Viceroy is declared, in case the old one dies.

If a Viceroy dies in the East Indies, there are always five *Vias*, as they call them, which are letters under the King's seal, figured 1, 2, 3, 4, 5, which they open according to their figures, beginning with number 1, and so on, in case those named in the first be dead, till they light of one whom the King has appointed Viceroy. These letters are kept by the Jesuits, and opened at mass, in the presence of all the nobility and others, with great solemnity and state.

The several names of Title that are given to men that go into the East Indies, and are so Registered.

Fidalgo da casa del Roy nosso Senhor: This is a gentleman of the King's house, and the chief title.

Moços Fidalgos: An honourable title, and are commonly gentlemen's sons, or advanced by the King's favour.

Cavalleiros Fidalgos: This is a title of a

knight, and much abused by a number of base fellows that are made so.

Moços da Camara: These are the King's servants, some of his chamber, some of his accounts, and some for other service. And this is the first degree of credit, and, as they deserve, so they are advanced to better.*

Escudeiros Fidalgos: These are esquires.

Homes Honrados: Which is men of honour, and the meanest rank amongst them. Every man that serves the King in the Indies is paid according to those titles; and when they return with their certificates into Portugal, under the hand of the Viceroy and Matricola-General, the King prefers them according to their titles and places.

The several Countries from whence East India Commodities are brought.

Cloves from the Molucca Islands; mace and nutmegs from Banda, Java, and Malacca; pepper from Malabar; cinnamon from Ceylon; pearls taken at a place called Bahrein in the Persian Gulf, in June, July, August, and September; sandal from Cochin and Malacca; all China commodities from thence, as quicksilver, white sucket,† camphor, lignum aloes, China roots, fine silk and latten; galls from Cambay, Bengal, and Siriam; ginger from Cambay and many other parts; wax and long pepper from Bengal; musk from Tartary, by the way of China; coquo de Maldivia from the shores of Maldivia; indigo from Sind and Cambay; long pepper from Bengal and Malacca; opium from Pegu and Cambay; aloes socotrine from the island of Socotra, where St. Thomas was

* See *ante*, ii. p. 174. † Sweetmeats.

shipwrecked ; manna and wormseed from Persia ; rhubarb from Persia and China ; calico from Calicut. Sumatra abounds with all things before expressed ; it hath great store of ordnance and other kinds of small shot. The greatest piece that was ever seen in Europe was taken from the King of Acheen by the Portuguese of Malacca and sent into Portugal, which ship was cast away at the island of Terceira when I was with my Lord of Cumberland at those Islands in 1589.*

Some Particulars of the Carracks in their voyages to the East Indies.

Every man that goes puts in security to perform the voyage ; and if he goes not he is sure to pay dearly for it.

The master and pilot have for their pay, outward and homeward, seventy five pounds each. But the room allowed them to carry commodities they commonly let out for five thousand ducats. No officer that goes but buys his place of the provisor.

The boatswain has for his wages one hundred and twenty five ducats, and three thousand ducats freight ; the quartermaster has for his wages seventeen shillings and six pence *per* month, and two thousand six hundred ducats freight ; and every other officer according to his rate and proportion. The factors and the pursers have no pay, only their cabins allowed, which will stow twenty pipes of wine apiece, and a cabin aloft to lie in.

There is no difference in their allowance of

* Three enormous basilisks were taken at Diu in 1537 ; one of them was sent as a curiosity to Portugal where it was kept in the castle of St. Julian and called ' The gun of Diu.'

victuals, every man has 1¾ lbs. of biscuit, a pint of wine and a quart of water a day, and thirty two pounds of flesh a month; onions, garlic, and dried fish are eaten at the beginning of the voyage. Sugar, raisins, honey, prunes, rice, and such things, are kept for the sick men.

Every man makes his own provision to dress his meat, as wood, pans, pots, *&c.*

There are officers for the King that give the same allowance to the soldiers; for the soldiers and sailors are served apart.

In their return the King pays no soldiers; and such soldiers as come home are passengers, and have no allowance either of meat or wages.

The sailors in their return have no allowance of meat, only bread and water, till they come to the Cape of Good Hope, and then they make provision themselves. They are only allowed the stowage of their chest below, which, if they sell, they may have eighty ducats for it.

No soldier that comes home, as aforesaid, can depart the Indies without a pass from the Viceroy, and they must serve there five years before they can have it.

In sailing to the Indies oftentimes they keep too much to the coast of Brazil, and are forced home again because they cannot double the shoals of Abrolhos.

The ship that goes from Mozambique to Goa, no man can adventure in but the Captain of Mozambique and such persons as are married in the town. For none but married men are suffered to live there because of peopling the place, which is very unwholesome and infectious.

The government of Mozambique is worth to the Captain, for his three years, three hundred thousand ducats. But after his three years

he is bound to serve at the command of the Viceroy three years more, unless he have a special patent from the King to the contrary.

The brave Exploits of the Portuguese at Aden, and other Places.

The great success of the Portuguese purchased them both fame and envy, as well from Christian princes as Turks; and Suleiman the Magnificent, in the year 1537, attempted, by his bashaw Suleiman, in Egypt, a voyage against the Portuguese at Aden, upon the mouth of the Red Sea.

He furnished himself with eighty brave ships, twenty five foists, four galleasses, twenty galleys, and seven other vessels; all which he carried from Cairo to Suez in pieces, being eighty miles by land. With these forces he resolutely besieged Aden, which was defended with greater valour by the Portuguese and their governor, Francisco de Almeida. The Turks were forced to retire with great shame, carrying some few Portuguese they had taken prisoners to Constantinople, and committing most barbarous cruelty upon them.

Dom Affonso d'Albuquerque, with thirty ships won Calicut; with twenty one he took Goa; with twenty three, Malacca; with twenty six he entered the Red Sea; with twenty two he recovered Ormuz. Lopo Soares made a voyage into the Red Sea with thirty seven galleys. Diogo Lopes de Sequeira with twenty four ships laid siege to Guaderé.

Henry de Menezes wasted Patan with fifty ships. Lopo Vaz de Sampayo left in the arsenal one hundred and thirty six ships of war, very well furnished. Nuno da Cunha undertook the expedition to Diu with thirty six ships.

The famous Exploit of Ferdinand Magellan* in the first Circuiting of the World.

The honourable exploits and enterprises of the Portuguese nation ceased not, but still one or other of them was in action and would not be satisfied till they had searched and brought to light the western parts of the world, as by their endeavour and labours they had done the eastern. For it seems they had an opinion of the world's roundness, and that by a ship sailing westward, and another eastward, they might meet together by consent if the western sea could be discovered.

The man that first undertook to resolve this doubt was Ferdinand Magellan, a Portuguese by nation, and a gentleman by birth, who having lived seven years in the East Indies, and pondering with himself that the world was round, thought there might be another way to the Molucca Islands besides the common known course by the Cape of Good Hope; and was the more emboldened to it by a kinsman of his own, João Serrão, who dwelt in the Moluccas.

Upon his return to Portugal, what the occasion was is unknown, but he and another gentleman, called Ruy Faleiro, left the service of their King in 1516, and offered it to Cardinal Ximenes, then Archbishop of Toledo, and governor of Spain upon the death of King Ferdinand.

Dom Manoel, King of Portugal, hearing of the

* Properly, Fernão de Magalhães.

flight of these two servants of his sent to expostulate their departure, accusing them as fugitives and his subjects, and unfit for any prince to entertain, and sought to divert their proposition of a new discovery but could not prevail. Ruy Faleiro was so highly concerned for leaving the King's service, and the dishonour that would redound to him by it, that for very grief he run mad and died. But Magellan, being honoured with the order of knighthood of St. James, proceeded upon his voyage, and set sail the 20th of September from San Lucar, and in the year 1519. He arrived at Teneriffe, one of the Canary Islands, on the 26th of the same month. Then coming into twenty two degrees, on the coast of Brazil, he found a harbour, and called it the river of João Serrão, after the name of his pilot. From thence he went to port St. Julian, where he wintered, and there his death was conspired by some captains and others of his company, who were executed for it in the said port of St. Julian.

Mr. Doughty, that conspired the death of Sir Francis Drake, (as Sir Francis pretended) was there executed; and in this island they found a part of Magellan's gallows on which his men were hanged. From hence Magellan came to the river of Santa Cruz, where one of his ships was lost but the men saved. Sailing thirty leagues further he came to a cape, which he called by the name of Ursula, because it was upon St. Ursula's day he there entered the Straits, and one of his ships forsook him and returned home, whereof Estevão Gomez was pilot.

He found the Straits a hundred and thirty leagues in length, and two in breadth, the shore deep, and land full of snow, though it lay but in fifty two degrees. The point from whence he

discovered the South Sea, he called cape Deseado and placed a cross on it, as a token for his ship, which he did not think was returned. Now did he conjecture the Moluccas were not far from him, but therein he was deceived. From the Straits he sailed three months and never saw land, and was put to wonderful extremity for want of victuals, and many of his men died with hunger. The first island he fell in withal, he found uninhabited; and being two hundred leagues, one from another, he called them Unfortunate Islands. Then came he to other islands which he called Ladrones because they were all thieves, and like gipsies.

The 18th of March 1521 he landed upon an island called Zamal, thirty leagues from the Ladrones, uninhabited; yet he stayed there to refresh his men upon it. And after arrived at an island called Suluan, where he found civil usage; and so many islands there together, that they called the sea Archipelago de San Lazaro.

He passed by the islands Surigao, Huynan, and many others, till he came to the island of Batuan, where he was civilly entertained, and at Catagan.

He went, by the help of pilots he took from one island to another, till he came to Sebu, which is the best island of all these. The 7th of April he sent to visit the King of Sebu, who used him courteously; and here he met with some Moors, who told the King of their countrymen the Portuguese being at Malacca and in the Indies. The King of Sebu, with his Queen, and all the whole island was baptised, the King called Carlos after the Emperor, his son Hernando, after his brother; and here they destroyed all their idols.

Not far from Sebu there is another island called Mactan, where the King refused to pay tribute to Magellan in the Emperor's behalf, whereupon

he made war with him and was unfortunately slain, with eight of his company. Which, in my opinion, was great folly in Magellan to adventure his life against a people and island that never Christian was likely to come to more.

After his death, his company chose João Serrão and Duarte Barbosa, Portuguese, for their commanders. Serrão was after betrayed by his interpreter, and himself and thirty of his men slain and as many taken prisoners. Upon this disaster the King of Sebu renounced his religion, beat down the churches and crosses, and returned to his ancient idolatry. Eight of the thirty that were taken prisoners were sold into China ; and within few days after Magellan's death they had news of the Molucca Islands. Going from Mactan they found an island called Bohol, where they burnt one of their three ships to furnish the other two.

They came to the island called Panglao, the people being most black. From thence they went to Quipit, to Cagayan, and to Palawan; then to the island of Borneo, where the King entertained them with great magnificence.

They arrived at the island of Balambangan, where they stayed forty days to trim their ships, to take in water, wood, and other necessaries. Some of the men by this time were altogether without clothes. And there they found leaves, which, when they fell from the trees, would move and stir as though they were alive ; and, being cut, blood would come out of them.

In sailing to Tagma and Sulu they passed the sea of weeds, and in those islands found great pearls ; and then they went to the islands of Basilan and Candigar, where they took a canoe that informed them of the Molucca Islands. And passing by many other islands, on the 8th of November, 1521,

they arrived at the Moluccas, and the island of Tidor, where they were honourably entertained by the King. He told them he had seen in the heavens certain signs, that such ships and such men as they were should come to that island. And, for the more friendship with the Emperor, he would have his island called no more Tidor, but Castile : this King was a Moor by religion.

The King of the island of Gilolo was a pagan, but came to them with great friendship : both these Kings accompanied them to the island of Mareh, and when they parted it was with tears. From thence they came to the islands of Batchian, Laigama, Siku, Api, Tapa, Lattoe, Lissamatula, Terong, Buro, Amblau, and many others, till they came to Galian and Mallua, where they stayed fifteen days to mend their ship.

They arrived from Mallua to Timor on the 25th of January, 1522, and here the men mutinied. In this island they found great store of sandal wood, and in it the French pox is very rife and common, and, coming to Tidor, they had plenty of cinnamon. From hence they directed their course to the Cape of Good Hope, shunning the sight of the island of Sumatra or any other land. After many days sailing with contrary winds at last they came to the Cape of Good Hope, and, finding their want and extremity so great, many of them moved to return to Mozambique and to submit themselves to the mercy of the Portuguese ; but most voices withstood it though half the men were dead.

After a long navigation they came to the islands of Cabo Verde, and set their boat on shore, where fourteen of them were betrayed by the Portuguese of that island. And Juan Sebastian del Cano, then captain, who had outlived all the other

commanders, perceiving the falsehood of the Portuguese, he hoisted sail and directed his course to San Lucar in Andalusia, where he arrived on the 6th of September, 1522, with only eighteen Spaniards of all those he carried with him, having been upon the voyage three years wanting twelve days, and celebrated Monday for Sunday, (that is to say) one day's difference in computation.

The other ship turned back, by reason of her weakness, towards New Spain. And, being crossed five months with contrary winds, was forced back again to the Molucca Islands, where she met a fleet of five ships of the King of Portugal's, commanded by one Antonio de Brito, who took both ship and goods and sent the men prisoners to Malacca. This afterwards bred great contention between the two Kings of Spain and Portugal.

An Addition of the Author's concerning this Voyage of Magellan.

This voyage of Magellan decided a long and doubtful question amongst the learned, as well divines as others; some being of opinion that the world was round, others not. And, amongst the rest, that famous father of the church, St. Augustine, held that the world was not round, as is apparent by his works.

But Magellan's ship having circuited about it, as by his voyage is manifest, hath given full satisfaction to the erroneous conceits of those that denied the roundness of it. In my opinion if the world had been certainly known to be round, as no doubt but it was imagined by Columbus, it might be a great motive, and indeed an unanswerable reason to urge and encourage him to the discovery of a new land, after the open sea about

the Cape of Good Hope was known, and the East Indies found out by the Portuguese.

For he could not be so ignorant but understand that, by running a westerly course from the Canary Islands, if he were not interrupted by a land the sea would conduct him to a place discovered by the Portuguese in the East Indies. And then, if the worst befell him that could, yet he should be able to shake hands with the Portuguese, his neighbours, in the most remote regions of the world, though a great deal of the honour of Columbus's discovery westward is to be attributed to the Portuguese.

A Difference betwixt the Spaniards and the Portuguese about the East Indies.

The Straits being newly discovered, which took the name of Magellan and gave an entrance in the South Sea, and by consequence unto the Molucca Islands, added fuel to the fire before kindled between Charles V. Emperor, and King of Spain, and Dom João II. of Portugal, about the right of those Islands, to whom they should belong, upon the partition of the New World.

This bred a long question between the two princes, till it was accommodated, as shall appear in my discourse of the north-west passage.

As all good successes encourage men to follow the steps of the treaders-out of the way, even so did this discovery the more animate them because it brought with it both honour and profit, not only by the places discovered but by the known wealth they yielded. And, out of hope that other enterprises might prove as famous and commodious, the Spaniard neglected no occasion to second his late discovery; and therefore, in the year

1525, this tract and passage was attempted by Garcia de Loaysa, a knight of Malta, with seven ships, and four hundred and fifty men. He departed from Coruña with unfortunate success; himself passed the Straits but died in the voyage. Some of his ships were lost, others put into New Spain; his own ship arrived at the island of Tidor in the Moluccas, another came to the island of Bachian, where the King thereof entered his ship under colour of friendship, slew the captain, his brother, and took all the men prisoners: another was lost in Candigan; and, to conclude, they all fell into the hands of their enemies, either Portuguese or islanders.

Vargas, bishop of Plasencia, sent seven ships out of Bilbao to the Moluccas; only one of them passed the Straits and arrived at Arequipa, a port in the South Sea, and went no further. This ship was the first that discovered the lying of the coast of Peru.

Notwithstanding the many disgraces and losses the Spaniards received by this new found Strait yet it did nothing dishearten them; but they tried by all ways and means how they might have access to the Molucca Islands by another way than by the Cape of Good Hope. And Hernando Cortes, the conqueror of New Spain, by order of the Emperor sent three ships with four hundred men, in the year 1527, the General, Alvaro de Saavedra, to seek the Moluccas from New Spain, which succeeded no better than the rest had done.* Neither was the Straits left off, but often attempted by these that follow.

The second enterprise, after Magellan, was by

* Saavedra reached the Moluccas but failed to make the return voyage.

two ships of Genoa, which arrived at the mouth of it, and one of them with a storm was cast away at the river of Plate, the captain called Pancaldo; the other returned home.*

Sebastian Cabot, a Venetian, would have passed the Straits but could not; he returned to the river of Plate, being then employed by Charles V. King of Spain.

Amerigo Vespucci was sent by Dom Manoel, King of Portugal, to find the Straits; but neither could find the Straits, nor yet the river of Plate.

Simon de Alcazaba went with divers ships and four hundred and forty Spaniards; but before they came to the Straits they mutinied, and ten or twelve being slain, returned.†

From these times till the year 1577 the attempt of the Straits lay dead, not any one seeking to enterprise it till Sir Francis Drake had it in agitation, and performed it with as great a resolution, to the general honour of our nation.

It was after this, and in the year 1586, begun and performed by Mr. Cavendish. The time of his departure from England, his days of sailing, the space he was abroad, and the time of his return, shall appear in a brief repetition I have made by way of journal, with some addition of Sir Francis Drake himself, which is the next that follows.

* Monson's authority for this is the 'Discourse' of Lopez Vaz (Hakluyt, *Voyages*, xi. 258, ed. 1903).

† In 1534. Alcazaba was killed in the mutiny.

An Introduction to Sir Francis Drake's Voyage about the World.

I HAVE laboured in all my relations to walk uprightly, and with integrity, neither swaying to the one hand nor bending to the other. I have endeavoured to carry my intentions so equally as not to deserve blame for commending, nor reproof for detracting, more than truth leads me. And as I have begun so indifferently so will I continue as sincerely, and say somewhat of this noble gentleman Sir Francis Drake, who is to enter into the next rank of my discourse.

There is no man so perfect but is fit to be amended, nor none so evil but he has something in him to be praised. And comparing the imperfections of Sir Francis Drake with his perfections, the world, and not I, shall truly judge of his merits.

His detractors allege to his blemish and imputation the baseness of his birth and education, his ostentation and vain-glorious boasting; his high, haughty, and insolent carriage; and except against his sufficience for a General, though they allow him to be an able captain. His friends and favourites answer in his behalf that the meanness of his birth was an argument of his worth; for what he attained to was by no other means than merit. They say that every man is son to his works, and what one has by his ancestors can scarcely be called his own; that virtue is the cause of preferment, and honour but the effect; that a man is more to be esteemed for

being virtuous than being called worshipful; the one is a title of honour, the other desert.

Marius being upbraided by Sulla, in the like manner, for the baseness of his birth and haughtiness of carriage, answered, that he was not of so great a family as Sulla, yet Sulla could not deny but that he was the better man. For in Sulla's house were painted the acts of his forefathers; but in his were hung up the banners that he himself had won from his enemy.

In excuse of Sir Francis Drake's ostentation and vain-glory, they say it was not incident to him alone but to most men of his profession and rank. It is true he would speak much and arrogantly, but eloquently, which bred a wonder in many that his education could yield him those helps of nature. Indeed he had four properties to further his gift of speaking, *viz.* his boldness of speech, his understanding in what he spoke, his delight to speak, and his use in speaking. And though vain-glory is a vice not to be excused, yet he obtained that fame by his actions, that facility in speaking, and that wisdom by his experience, that I can say no more but that we are all the children of Adam. His friends further say that his haughty and high carriage is somewhat excusable when it appears not but in his command; for a General ought to be stern towards his soldiers, courageous in heart, valiant in fight, generous in giving, patient in suffering, and merciful in pardoning. And if Sir Francis Drake was to be praised for most of these virtues let him not be blamed or condemned for one only vice. Many times where a man seeks obedience it is imputed to his pride and high carriage; but if people's hate grew upon envy, (as it is likely) it appeared greater than if it had been grounded upon injury.

The exceptions against him by those that derogate from him in saying that he was an evil General, are his improvident care in furnishing his fleet to the Indies; his not keeping San Domingo and Cartagena when he was possessed of them; his weak preparation for so great an expedition as that of Portugal; his promise to go up to Lisbon that voyage, and failing; the taking of the pinnace, with his directions, in his way to the Indies in 1595. All these I formerly handled and refer the reader to the place where they are treated of; though something I will say of him, as he was a private captain,* and especially of his renowned voyage about the world, being the first attempt of that nature that ever was performed by any nation except the Spaniards themselves. And it was the more honour to him in that the Straits of Magellan were counted so terrible a thing in those days that the very thoughts of attempting it caused fear; secondly, in that it had been but once passed, and but by one ship that ever returned into Europe, and that about fifty nine years before his enterprise. His praise was, that he could carry a voluntary action so discreetly, so patiently, and so resolutely, in so tedious and unknown a navigation, the condition of seamen being apt to repine and murmur. But, lastly and principally, that after so many miseries and extremities he endured, and almost two years spent in unpractised seas, when reason would have bid him seek home for his rest, he left his known course and gave an attempt upon an unknown sea in forty eight degrees.

* See previous notes (iii. pp. 20, 63; iv. p. 15) on 'private captain.' The collations leave it uncertain whether, in this case, the term existed in the MSS. which have long since been returned to their owners.

Which sea or passage he knew had been often attempted by our seas but never was performed.

This attempt alone must silence all his detractors; for it shewed an extraordinary resolution in his person, a special desire to enrich and benefit his country, and a singular patience to endure the disasters and mishaps that befel him.

And yet he must not go so clear without stain or blemish. For you must know that though he deserved well in the direction and carriage of his journey, yet the ground of his enterprise was unjust, wicked, and unlawful, his design being to steal, and thereby to disturb the peace of princes, to rob the poor traveller, to shed the blood of the innocent, and to make wives widows, and children fatherless.

No man had truer trial of the inconstancy of Fortune than he. For the nature of Fortune is to bite when she flatters, and to strike when she is angry.

What his birth and other deserts were, needs no reiteration. Fortune did much for him, but at his death she was angry with him: first, in that there was a doubt whether it was natural; secondly, and the best his friends can say, that it was caused by grief for failing of his expectation in that voyage; thirdly, after his many well-deserving services, his heir was prosecuted and perplexed for debts and accounts to the Crown; and lastly, died, like Pizarro and Almagro, not having the happiness of a child to succeed him and perpetuate his memory.*

* It will be of interest to append here an appreciation of Drake by the Spanish naval historian, Captain Don Cesário Fernandez Duro (*Armada Española*, iii. pp. 112 et seq.):—

'Without any possible doubt it was the initiative, example, and inspiration of Drake that created and rapidly developed the (? *esprit-de-corps* of the) English navy. An excellent

sailor, of penetrating observation, daring as none other, he laid the foundation of his successes upon the knowledge he had acquired of the neglect and carelessness which form an integral part of the Spanish national character, and of the vulnerable points which necessarily existed in so vast an empire. He always counted upon surprise rather than upon force, and thus he sailed round the world in a ship of moderate size with less than 100 men, filled her hold with gold, burnt ships, and sacked towns without firing an arquebus. In San Domingo, Cartagena, and Florida we see him bringing away 200 guns in proof that they had adorned those cities governed, in peace and tranquillity, by lawyers and civilian officials. In the attack on Cadiz, the most daring of his deeds, the glory is due to the acuteness which enabled him to assure himself that he would meet with no resistance there, where universal opinion relied upon the name and fame of King Philip. These were all deeds of a very skilful corsair and fortunate highwayman, but no sooner had the declaration of war put the towns and ships on guard than the good qualities of the sailor were eclipsed, and the weakness of the military leader became apparent. Timid and irresolute, he remained in the Channel, or off the shoals of Flanders, never daring to expose the sides of his flagship in face of the galleons so irresponsibly commanded by the Duke of Medina Sidonia. Weak, he succumbed to the temptation of laying siege to a town of such little importance as Coruña, and made the tactical mistake of not forcing the harbour of Lisbon, defended by a few galleys, and of allowing these to open fire on him in his retreat, while the letters wherein he endeavoured to disguise these disasters show presumption and arrogance. Commanding a powerful fleet of 28 ships and 4000 men, in the Canaries, at Puerto Rico, and at Las Cruces a few defenders behind temporary trenches checked and dismayed him, as is proved by the fact that he kept clear of Havana and Cartagena where he knew that he was expected. He was at great pains to burn open towns, of wooden houses, such as Rio de la Hacha, Santa Marta, and Nombre de Dios, and, in the end, was disheartened because the treasures of temples and courts were not delivered to him as was done when towns were surprised in time of peace. As pirate or corsair, (*i.e.* privateer) if the latter word is preferred bearing the meaning of that era, he was eminent; as Admiral or General he is not among those who make England's glory.

'Perhaps he was more famous in Spain than in his own country.'

Sir Francis Drake's Voyage round the World.

Sir Francis Drake departed from Plymouth with five ships and a pinnace on the 13th of December, 1577. The 25th he fell in with the coast of Barbary; the 28th of January 1578 with the isle of Mayo at Cape Verde; the 13th of March he passed the equinoctial line; the fifth of April he fell in with Brazil, in thirty degrees, and so to the river of Plate where he lost the company of two of his ships. But meeting them again, took out their provisions and cast them off.

The 20th of May they came to St. Julian's port, where the people were extraordinary tall of stature, and Magellan termed them giants. This was the place where Mr. Thomas Doughty was executed the 2nd of July, 1578, and in the same island where Magellan executed his mutineers, part of the gallows remaining which Sir Francis Drake found there, as I have shewed before.

The 20th of August he fell in with the Straits of Magellan; the 6th of September he passed them; the 25th of November he came to Mocha, an island off Chile, in thirty degrees, where he had appointed a meeting of the ships that had lost company, but Captain Winter was returned home after he had passed the Straits. The 5th of December he came to Santiago; the 19th to Coquimbo, where the Spaniards armed three hundred men against them.

In February he arrived in Peru, the 13th at

Lima; the 16th of March at Cano island, where he felt a terrible earthquake in his ship. From the 16th of April, till the 5th of June, he sailed without seeing land, and arrived in forty two degrees, thinking to find a passage into our seas, which land he named New Albion. The people were courteous and took his men for Gods; they live in great extremity of cold and want. Here they trimmed their ship, and departed the 23rd of July, 1579, standing his course for the Moluccas.

The 13th of September he fell in with certain islands, where he met with the worst conditioned people of all his voyage. The 19th of October he came to Mindanao, where he watered; then to the islands Tulur and Sarangan the 1st of November; the 3rd he had sight of the Moluccas, and coming to Ternate, was kindly and civilly used by the King; the 10th of December to Celebes. On 9th of January 1580 his ship struck upon a rock, but was most miraculously preserved: he came near to Boeton, where he was refreshed, but found the people cruel. The 12th of March he came to Java Major, thinking to go from thence to Malacca, but necessity forced him to direct his course homeward. The 24th of March 1580 he departed from Java; the 15th of June he passed the Cape of Good Hope, having fifty seven men and but three butts of water; the 12th of July he came under the line; the 16th he fell in with Sierra Leone in Guinea, and there watered; the 22d of August into the height of the Canaries; the 11th of September into the height of Terceira; the 24th in sight of Scilly; the 25th to Plymouth, where he was well welcomed, and his ship afterwards carried to Deptford, where she lieth for a memory, and himself knighted in her as he worthily

deserved.* He differed one day in his account; Monday he found Tuesday by our week, and the reason is in sailing westward they find one night of sun-setting less than in going east from west.

* The Golden Hind, or Pelican, was placed in a rough kind of dry dock at Deptford where she remained as one of the sights of London until she was broken up early in the reign of Charles II. A chair made from her timbers was presented to the University of Oxford by John Davies of Deptford, and Cowley versified upon the subject.

A brief relation of Mr. Cavendish, who circuited the World in the Year 1586.

This voyage into the South Sea was often attempted by sundry Englishmen after Sir Francis Drake had led the way, but never any of them had the fortune or happiness to perform it, but only Mr. Cavendish, whose voyages I briefly treat of next.

Mr. Cavendish, having spent his best means at Court, thought to recover himself again by a voyage into the South Sea; for then the wars with Spain began, and it was lawful to make any spoil upon the Spaniards. According to his hope, he enriched himself with a greater fortune than was left him at first, if discretion had taught him how to manage it.

He built two ships from the stocks for this voyage, and departed from Plymouth on the 21st of July, 1586. The 5th of August he fell into the Canaries; the 27th of September he departed from Sierra Leone in Guinea; the 16th of December he fell in with the coast of Brazil; the 6th of January he put into the Straits of Magellan, where he found but eighteen Spaniards alive of five hundred which Pedro de Sarmiento left there in his unfortunate voyage he undertook to intercept the English in their passage that way.

The 24th of February they were out of the Straits; the 14th of March came to the island of Sta. Maria and Chile; after, to Morro Moreno and the town of Arica; the 3rd of May, 1587,

he came to Pisco, from thence to Paraca, to Payta, and to the island of Puña.

The 12th of July he passed the equinoctial; the 27th he came to Aguatulco, which he burnt; the 13th of August to the port of Navidad, and then to Santiago; the 8th of September to the bay of Compostella; the 12th to the island of St. Andrew; the 24th to the bay of Mazatlan, and so to the port of Aguada Segura, near the cape of California, where he lay till the 17th of November, and took his great and rich prize that came from the Philippine islands.

In forty four days he went to the islands of Ladrones, being nigh two thousand leagues from thence; the island he fell in withal was called Guam. The 14th of January to the Philippines, he fell in with Ticayo, then to Manila, and so to the Moluccas; he passed by the islands of Mindanao, Sulu, and Borneo. The 5th of March to Java Major; the 16th of May he fell in with the Cape of Good Hope; the 8th of June with the island of St. Helena; the 4th of July 1588 he passed the line, being the fourth time he had passed it. The 24th of August he saw Flores and Corvo; the 3rd of September he met a Flemish hulk that told him the good success of our Navy against the Spaniards in 1588; the 5th he met with Captain Clarke of Southampton, who had taken a Brazilman. And the same night, entering into our Channel, he endured a greater storm and more danger than in his whole voyage, as he himself hath confessed to me. The 9th he came with great joy to Plymouth, and was received with general applause for his honourable enterprise, as he well deserved.

As there were divers Englishmen that attempted this voyage to the South Sea, and only two performed it, as you have heard, so

there were two others that passed the Straits but not with the like success, *viz.* Sir Richard Hawkyns in 1593, who found the Spaniards better provided by the warning they took of Drake and Cavendish. The Spaniards, having intelligence of his coming, after a long and cruel fight took and carried him and his ship to Lima, where he remained prisoner till 1597 and was then brought for Spain in that fleet I met and fought at the Terceira Islands.

The other that passed the Straits was Mr. John Davis, the discoverer to the north-west, who being captain of the Desire with Mr. Cavendish in his second voyage, and the same ship he had performed his voyage about the world in, repassed the Straits when Mr. Cavendish could not. But by contrary winds and foul weather was forced to return back again.

Captain Davis was after slain in his third voyage to the East Indies. These two voyages of Drake and Cavendish proved so happy that they encouraged not only Englishmen but Hollanders to enterprise it, hoping to annoy the King of Spain, those Straits giving a passage to Peru, the fountain and well-head of all his wealth.

Of such Englishmen as attempted the Passage of the Straits and failed.

In the year 1582, and two years after Drake's return, her Majesty sent two ships and two pinnaces, under the command of Mr. Edward Fenton, to try his fortune in the South Sea; which the King of Spain hearing, he employed Diego Flores de Valdes, (who was after General of the Castile squadron for England in 1588) to waylay Fenton as he passed the Straits of Magellan. Which Mr. Fenton being informed of when he arrived at Brazil, and in the same port where two of Flores's ships had stayed and with whom he had a small encounter, and perceiving it was in vain to proceed any farther, he returned home without seeing the Straits.

This voyage of Flores, from the beginning to the latter end, proved most miserable and unfortunate. For, besides the loss of the greatest part of his fleet and men in going and coming, he built a fort within the Straits and placed in it for governor Pedro de Sarmiento, with five hundred Spaniards, who perished, as I have before expressed. Don Pedro shipped himself for Spain, but on his way was met and taken by Captain Jacob Whiddon who brought him to England where I became acquainted with him.

The Earl of Cumberland, on the 26th of June, 1586, sent two ships and two pinnaces to pass the Straits, in the year after the war broke out betwixt England and Spain. These ships arrived in

forty four degrees upon the coast of Brazil, to the southward of the line, intending to prosecute their design for the South Sea; but proceeded no farther.

Mr. Chidley, in 1589, being encouraged by the good success of Mr. Cavendish, who, the 9th of September before, arrived from his prosperous voyage, sold his lands to furnish himself in this expedition for the South Sea. But his success proved most miserable, himself and most of his men dying without seeing the Straits or returning any profit towards his expense.

Mr. Cavendish, having spent what he got in his former voyage, attempted a second in 1591, but with the like success as Mr. Chidley, both as to death and failing of the sight of the Straits, except in his ship the Desire which I have spoken of.

Mr. Benjamin Wood, a mariner by profession, but more understanding than ordinary mariners, undertook this voyage with one ship and a pinnace, in 1596, belonging to Sir Robert Dudley. But there was never any news of ship or man, being supposed to be cast away upon the shoals of Abrolhos, which lie almost fifty leagues off to sea in seventeen degrees upon the coast of Brazil.

Of such Holland Ships as have passed the Straits; but to little Purpose or Profit.

FIVE ships went from Holland in 1598 and passed the Straits of Magellan; only one of them returned by the Cape of Good Hope. In those ships there went divers Englishmen, and particularly one called Mr. Adams of Limehouse. This man afterwards arrived at the island of Japan, where he was much esteemed by the people of that country, and found means from thence to give advertisement into England of his being there, and the state of that country, with desire that our merchants would undertake the trade of Japan. He was so industrious and careful to benefit his country that, if he had lived, he intended to have attempted a passage from thence to England by the north-east, which had been often enterprised from hence but still failed. It had been a vain thing to attempt it for that in winter the monsoons are always southerly and no sailing for a continual night, and in summer northerly, full in their teeth as they should pass.*

Five other ships of Holland passed the Straits in 1615; only their pinnace was cast away before she entered the Straits, which ships and captains I knew.†

The Nassau fleet departed from Holland in

* There were two Dutch expeditions in 1598; both passed the Straits but only one completed the circumnavigation. Cf. *ante*, ii. p. 240.

† The voyage of George Spilbergen.

1623 with the greatest pride and assurance of profit that men could do. They were termed the Nassau fleet because the Prince of Orange was the greatest adventurer in them. They were furnished with an extraordinary expense, and choice men, both of soldiers and sailors; but passing the Straits, and coming into the South Sea, they found the world much altered, for wheresoever they offered to land they were repulsed with loss and shame. So that, in conclusion, they could not perform so much with fourteen or fifteen choice and brave ships, and two or three thousand men, as Mr. Cavendish had done with one ship alone of a hundred and twenty tons and thirty men, he having landed in several places.*

William van Schouten, in 1616, discovered a new passage into the South Sea, three degrees to the southward of the Straits of Magellan; in which voyage he arrived at many islands, in his course to the East Indies, that were never discovered or known before, where he found people of several complexions. But none of those places where he arrived gave any great hope or promise of profit, if the navigation thither had been easy.

This shall suffice touching matters of the East Indies, and the Straits of Magellan, until I have occasion hereafter to mention them. And another while I will direct my course unto America and the West Indies, which was discovered within few years after the East.

* This is the second time that Monson has confused the Nassau fleet with an auxiliary squadron of eleven sail and 1600 men which sailed, also in 1623, under Jacob l'Heremite to attack the Spanish settlements on the west coast of America. As he says it did nothing memorable, whereas the Nassau fleet, proper, was successful.

The Discovery of America by Columbus.

AMERICA was so called after Amerigo Vespucci, a Florentine; but, in my opinion, there was least reason to do him that honour of all those that took upon them to discover in his time. I could never hear of anything he did of fame, no, not so much as the finding the river of Plate when he went upon the discovery of it.*

No man deserved to have that country called after his name but Columbus, the first discoverer of it, who was unworthily and unthankfully dealt withal by the Spaniards in Española, where he was governor, for they sent him prisoner into Spain in chains. But King Ferdinand and Isabel his wife are to be excused from any hand in this unthankful act; for they, hearing of his usage, caused him to be released. And before this happened they did him the greatest honour that ever was done to subjects, for they made him sit in their presence.

The Spaniards cannot be excused for their ingratitude to Columbus on another account; for they write, though few give credit to their relation, that a pilot in a caravel that was forced with an easterly wind upon the coast of America,

* To do Amerigo Vespucci justice, it was not he who caused the continent to be named America. The baptism was due to Martin Waldseemüller, the cosmographer, and was almost accidental. Many other names were suggested for the New World:—Isabelica, Jerisabelica, Atlantica, Colonia, Columbina, Iberica, Nuevo Mundo, and Orbe Carolino.

and returned but with three men alive, died in Columbus's house, from whom he had the light of his discovery. But no author either names the pilot's, or the caravel's name, or where she arrived, or to what province in Spain she belonged ; but, confusedly, one saith, she was a Portugese, another a Spaniard, another a Biscainer, another that she belonged to the island of Madeira, another to Terceira ; and they differ as much in the place where she arrived. This was foully done of the Spaniards, to detract from Columbus for no other reason but that he was a stranger.

Christopher Colon, or Columbus, as we call him, was born in Genoa in Italy, his original a mariner. Afterwards he betook himself to make sea-cards, and had this voyage in his thoughts for a long time, but was much troubled how to undertake it for want of means. For he saw the King of Portugal busy in his conquest of Africa and in his enterprise in the East Indies ; the King of Spain was as much taken up in his wars of Granada. Whereupon he sent his brother Bartholomew Columbus to Henry VII. King of England, who was both rich and free from war, but the King gave little credit to him. And indeed the three Kings did rather deride him than accept of his offers, looking upon him as a cheat and as an impostor.

Columbus being at Lisbon, embarked for Palos in Spain, where he spake with one Alonso Pinzon, a skilful pilot, and a Franciscan friar called Antonio de Marchena, a learned cosmographer. The friar desired him to recommend his design to the Duke of Medina Sidonia, and the Duke of Medina Celi, who had ships at that time in St. Mary Port ; but they rejected him as the Kings

had done, and looked upon his proposal as no better than a dream. Then the friar advised him to go to the King and Queen, who were at the siege of Granada, and writ to another friar in his behalf called Hernando de Talavera, the Queen's confessor. He came to the Court in 1485 and delivered his petition to the King and Queen; but being a poor man, a stranger, and evil apparelled, was scorned, only Alonso de Quintanilla, contador-mayor, gave him his diet. This contador one day carried him to Pedro Gonzalez de Mendoza, Archbishop of Toledo, who brought him to the King and Queen, and promised to furnish him for his voyage, when the war of Granada was at an end, which happened not long after. And because the King wanted money, an officer of his, called Luis de Santangel, lent him sixteen thousand ducats.

The discovery of the Indies, and beating the Moors out of Spain after they had been there seven hundred and twenty years, fell out both in one year.

Columbus was furnished with three caravels and a hundred and twenty men at Palos. Martin Pinzon was pilot of one, Francisco Pinzon of another, and Yañez Pinzon of the third, all three brothers, and departed the third of August, 1492. They came to the island of Gomera, one of the Canaries, where they refreshed; from thence he sailed thirty four days west without seeing land, insomuch that his company murmured and contrived his death, but he satisfied them with good words and promises. At last he spied a thick cloud, which proved land, on the 11th of October, whereat they all rejoiced, thanked God, and kissed Columbus's hands.

The first land they fell in with was called Guanahani, one of the islands of Lucayas. From thence he went to Española, then called Haiti, where the Admiral's ship was lost, but all the men and furniture saved.

The Indians fled from them, all but one woman, whom they took and clothed and used courteously, and let her go again; which did so much embolden the Indians that they resorted to the Spaniards and helped them to unlade their ship that was lost, and do them other services. And with the good will of the King they built a castle of wood, and left forty-four Spaniards in it under a captain, and this was the first footing the Spaniards had in the Indies. Columbus took ten parrots, some turkeys, and other things the land afforded, and returned to Palos in Spain in fifty days.

The King and Queen were at Barcelona when Columbus arrived, whither he went with his Indians and other rarities the third of April, a year after he departed from thence.

At his coming to the King the Indians were baptised, the King, Queen, and prince being present, who were their godfathers and godmother: they caused Columbus to sit by them, which was never done to any subject. They confirmed the privilege of the tenths, and gave him the title of Admiral of the Indies; and put about his arms this posy 'For Castile and Leon, Colon found a New World.' His brother Bartholomew was made Adelantado.

The Queen favoured this discovery more than the King, and would not for a while let any Aragonians go to the Indies without licence. The King rewarded many of Columbus's company; but the mariner who first discovered the land,

not being recompensed to his content, fled into Barbary where he turned Turk.

The Indians confessed to Columbus that there were many prophecies amongst them that they should be subdued with white men with beards, with apparel on their backs, with bright swords that should cleave a man in sunder, and should girt their swords to their sides.

Columbus, in his second voyage, had seventeen ships and one thousand two hundred men; also mares, sheep, cows, and corn to sow. The first land he fell in with was the island of Deseada; and coming to Española he found his forty-four Spaniards slain, through their own fault for injuring the Indians. He built a town, and in honour of the Queen called it Isabella. And now began the Spaniards and Columbus to disagree, as I have shewed before.

What afterwards befell the Spaniards, in their discoveries and conquests of the Indies, has been sufficiently handled by several authors.

I will only treat of the famous exploits of Francisco Pizarro and Hernando Cortes; the one, conqueror of the rich countries and mines of Peru, the other of the famous countries of New Spain and Mexico. Their births, originals, and adventures, are such, and so strange, that former times cannot shew the like, and, perhaps, in future ages they will scarce be believed.

Touching the first Discovery of the South Sea and the Conquest and Habitation of Peru, which is the richest place known in the World.

Vasco Nuñez de Balboa, an industrious man but in disgrace with his King, undertook the discovery of the South Sea with but a few Spaniards, and performed it with prodigious labour, sufferings, and danger from the Indians, with whom he often fought but God still gave him the victory. On the 25th of September, 1513, from the top of a high mountain he spied the sea to the southward of him, which so much rejoiced him and his men that it amazed the Indian King. He lighted upon a King called Chiapes, on the south side, who used him with much courtesy, furnishing him with necessaries and carrying him in his canoes to the island of pearls; and on this side Vasco sailed in the Gulf of San Miguel.

Vasco having discovered the sea and coast, settling friendship wheresoever he came, and gathering much wealth, returned to Darien, whence he first set out, and was received with much joy and triumph. Thence he sent away a messenger to give the King of Spain an account of his success, who pardoned his past offences and made him Adelantado of the South Sea.

Vasco Nuñez de Balboa continuing at Darien, Pedro Arias de Avila arrived there, being sent from Spain to take upon him that government,

and received by Vasco with extraordinary honour; but had Vasco's messenger arrived in time Vasco had been appointed governor. Arias de Avila carried one thousand five hundred men, but he and they behaved themselves so cruelly in all parts that they brought much destruction upon the Spaniards.

Vasco and he fell out, but were reconciled by means of a bishop, and Vasco married his daughter. Vasco being upon the South Sea, the place of his command, Pedrarias sent for him and accused him with false witnesses that he had said that he would not obey him, but would stand by himself with his three hundred men he had with him if any body offered to wrong him. Upon this false suggestion Arias de Avila put him to death; at which the King of Spain was much offended, and Arias gained the ill-will of all men, for Vasco was generally beloved and respected and Arias as much hated. The sentence given against him was unjust, being procured by false witnesses and out of a private grudge.

The Actions of Francisco Pizarro, Conqueror of Peru.

BEFORE I speak of Francisco Pizarro, his deeds and exploits, I will set down his birth and education that his actions may seem the more strange and admirable. He was bastard to Captain Pizarro, serving in Navarre, and was left an infant at the church door, where nobody would own or take compassion of him, so that he was nourished by sucking a sow for the space of three days, till at last his father for shame took him home and brought him to do all kind of drudgery ; and one day, sending him to keep his hogs in the field, he gave them a sort of poison which killed several of them. The boy, not daring to return home, run away and went to Seville, and from thence shipped himself for the Indies, and by degrees came to be ensign, and afterwards captain.

Pizarro and Diego de Almagro, being at Panama, were desirous, like other undertakers, to try their fortunes in discoveries. Almagro, being rich, drew to him one Hernando de Luque, a schoolmaster and priest of that town who was likewise wealthy. These three undertook a discovery, with a vow, one to another, equally to divide the profit that should accrue. It was determined amongst them that Pizarro should undertake the conquest, Almagro go and come with all necessaries to relieve them, and Luque to make provision for supplies. This happened in the year 1525.

The first voyage that Pizarro made was with one ship and eighty men. He sailed one hundred leagues; and went ashore several times, where he found sharp encounters, lost some of his men, and was himself hurt in several places. Which forced him to return to Chicamá, not far from Panama, repenting of his enterprise.

Almagro, who stayed behind Pizarro to supply him, as you have heard, went after him with seventy men, and came to the river of San Juan; and finding no sign of Pizarro's being there, returned. But at his going back he landed at some places where he found Pizarro had been, and where he was hurt. Almagro slew and hurt several men, and returned to Panama thinking Pizarro had done the like. But, understanding that he was at Chicamá, he went to him and by consent furnished two ships and carried two hundred Spaniards and some Indians. They arrived at a marshy and waterish place where the people live in trees: they are warlike, and killed many Spaniards, and called them the 'Scum of the Sea,' having no fathers, and said they would have none in their country that had beards or that would break their customs.

Pizarro and Almagro had a great desire to conquer that country because of the shew of gold and stones, but could not do it with that small force because many of them were dead. Almagro returned to Panama for fourscore men more, but before his coming back Pizarro endured great want of victuals.

Upon Almagro's return they found their forces so small, the country so barren and unhealthful, that they left it and went to Tacamez, where they found plenty of all things and thought to make themselves so rich that they needed not to

proceed further. But they were deceived, for the Indians were their enemies and so many that they durst not fight them. Almagro was to go back for more men to Panama, and Pizarro to stay in the island of Gallo.

The Spaniards were so weak and tired, and so discontented, that they desired to retire with Almagro and to leave their hopes of gold. But Pizarro would not suffer them either to go or write, lest they should have discredited the country and so Almagro would have got no soldiers. But notwithstanding this prohibition the soldiers writ and hid their letters in rolls of thread, by which means their miseries came to be known and complained of to the governor, who commanded that no man should stay with Pizarro against his will.

At Almagro's coming to Panama, one Pedro de los Rios was arrived for governor, who proclaimed that no man should stay with Pizarro against his liking, and sent a messenger to Pizarro to let him know so much. Whereupon most of his men left him, and those that Almagro took up run away from him so that Pizarro had but fourteen men left with him, whereof one was a Grecian. He went to an island called Gorgona, where he lived upon snakes, herbs, and crab fishes till Almagro's return from Panama. Then he went over to the main land, and put the Greek ashore, who brought him news of the riches of that country and the plenty of victuals, with the state of their King, Huayna-Capac, which was great joy to them all, for the South Sea was the fountain and happiness of all their discoveries. Pizarro hereupon returned to Panama, and from thence into Spain, to carry the Emperor news of this rich country which he desired the government

of. He left two Spaniards behind him to learn the language, customs, and riches of the country, but they were afterwards slain by the Indians.

Pizarro was above three years upon this discovery of Peru, and endured as much hunger, and other miseries as man could do.

Pizarro's return to Panama, thence into Spain, and thence back again to Peru.

At Pizarro's arrival at Panama he imparted the hope of his discovery to Almagro and Luque, his associates, who were grown poor by their undertakings, but yet furnished him with one thousand pieces of gold for his journey into Spain, most part of which they borrowed. At his arrival in Spain the Emperor gave him the title of Adelantado of Peru : and to encourage men to go with him Pizarro promised more riches than he knew of, though not so great as after it proved. He carried with him three of his brethren, Hernando, Juan, and Gonzalo, only Hernando legitimate ; and also Francisco Martin de Alcantara his half-brother. They arrived in Panama in great pomp and pride. But Almagro was offended with Francisco Pizarro because he had taken upon himself all the honour in Spain, and excluded him who was at all the expense and part of the labour and pains. Pizarro excused himself, saying he sued to the Emperor in his behalf who would only bestow the governorship of Tumbez upon him, but Almagro was nothing pleased with this although Pizarro promised him much.

The expense of the Pizarros was so great, and their means so small, that they could not proceed upon their enterprise without the help of Almagro,

whom Francisco Pizarro laboured to win again much to the discontent of his brethren, especially Hernando. In conclusion, by mediation of friends, Almagro furnished him with seven hundred pieces, and such arms and victuals as he had, so that Pizarro proceeded with three ships and as many men as he could carry. He came to a place called Coaque, where he found much wealth but endured much misery. From hence he sent to King Atahuallpa for friendship; who answered that if he would return the wealth gotten, and clear the country, he would be his friend; or else not. A friar was sent to persuade him, but all in vain, so that they came to a battle. Many of the Indians were slain, and their King taken prisoner; and not a Spaniard killed or hurt, but only Francisco Pizarro in the head as he was snatching at the King to take him.

Before this, Pizarro took the island of Puña and gained great store of wealth, which he gave to his soldiers that came to him lately. Here his people fell sick of the pox, a natural disease of those parts; and here he delivered seventy prisoners that had been taken by the islanders and sent them free to Tumbez, whence they were. Notwithstanding this courtesy they incensed the people against the Spaniards, and slew three that were sent in civil manner to treat with them, which so enraged Pizarro that he took their town and brought them to obedience.

These things happened before the taking of Atahuallpa prisoner; who, now being in their hands, offered for his ransom as much silver and gold as would fill a great room wherein he was; which he truly performed. But the time was so long before it could be brought two hundred miles that Hernando Pizarro adventured to go

for it; and in that journey he learnt much of the secrets of the country.

Francisco Pizarro divided the treasure thus gotten and gave to every man his due, reserving for the Emperor his fifth part; never soldiers in the world were so rich. He dealt justly with Almagro and gave him what was his due. All things grew to a great price among them, a pair of breeches thirty pesos, a quart of wine at seventy pesos, a sheet of paper ten pesos, and one thousand five hundred pesos for a horse. Pizarro sent his brother Hernando to the Emperor with his fifths, and a relation of what had happened. Many common soldiers went, who carried, some twenty, some thirty, some forty thousand ducats in plate.

There was an Indian called Felipillo, a Christian, and interpreter to the Spaniards, who fell in love with one of Atahuallpa's wives. And thinking to marry her after his death accused him of plotting the destruction of the Spaniards, for which he was condemned by course of law and strangled, but it was thought that the accusation of Felipillo was false. Before his death he desired to be baptised, but whether from his heart, or no, that is uncertain.

Pizarro, hearing the fame of Cusco, marched thither and took it, where he found as much wealth as he had by the ransom of Atahuallpa. And it is thought there was as much more hid that never came to light.

Almagro had commission from the Emperor to be marshal of Peru, and governor of one hundred leagues of land further than Pizarro. Whereupon he took upon him to govern Cusco and thereupon much strife was likely to happen betwixt them, but for the present accommodated. Almagro went

to discover the country of Chile, in 1535, where he endured much hunger, cold, and other dangers. He found rivers that run swift in the day and stand still in the night.

Hernando Pizarro returned out of Spain, and came to Lima after Almagro's departure to Chile. He brought a patent to his brother wherein he was made Marquis of Atavillos, and to Almagro the government of New Toledo.

He required all the silver and gold that was received for the ransom of Atahuallpa for the Emperor, the Inca being a King, but the soldiers answered they had paid their fifths, which was their due. This caused a sudden mutiny: but Pizarro appeased it, though with the ill will of his soldiers. Manco, whom Pizarro had made King, rebelled against him and had almost taken Cusco. In the conflict he slew divers Spaniards.

Almagro hearing the Emperor had made him governor, as aforesaid, returned out of Chile and took Cusco by force, alleging it was in his government. He imprisoned Hernando Pizarro and Manco the Indian King who had besieged it; and now began broils betwixt Almagro and Pizarro, and now did Francisco Pizarro receive many losses by the Indians that rebelled against him. Pizarro sent forces to regain Cusco from Almagro; but by mediation of friends they were to meet and consult before they fought, but to little purpose. For that treaty broke up, and they fought a most cruel battle in which Almagro was taken and put into the same prison he had put the brother of Pizarro, who there condemned and executed him. If the Indians had taken advantage of this division they had defeated the whole power of the Spaniards.

Almagro was of mean birth, and never known who was his father. He could not read; but was valiant, frank, merciful, and vain-glorious. Francisco Pizarro, upon this accident, sent his brother Hernando into Spain with the Emperor's fifths, and to excuse the death of Almagro. He came to Valladolid in great state and with much wealth, but within a while after was committed to prison.

Francisco Pizarro went on with his victories and endured great hardships; yet he prevailed, got great wealth, and made peace with the Indian Kings. Gonzalo Pizarro was a principal man in all these undertakings.

Francisco Pizarro's Death.

Francisco Pizarro, returning from the City of Los Reyes,* endeavoured to be reconciled to Diego de Almagro, son to him that was put to death, but he would accept of no conditions of friendship. Neither would Juan de Rada advise him to it, who was left in charge of him at his father's death with command to seek revenge of the Pizarros; and though Francisco Pizarro was still informed of the practice against him, yet he little esteemed of it. But, notwithstanding his security, on the 26th of June, 1541, Juan de Rada and ten others entered upon him whilst he was at dinner and slew him. He was a man neither liberal, nor covetous, nor would he proclaim what he gave; he was a good husband for the King, and a great gamester, not regarding with whom he played; he would never wear rich apparel, and yet sometimes would put on a garment that Hernando Cortes sent him; he

* Lima.

took a pride to wear white shoes and a white hat, in imitation of Gonzalo, the Great Captain; he used his soldiers well and got their loves. He was gross, valiant, and honourable, and negligent of his health or life.

Upon his death, his and Almagro's faction had many bickerings; and at last those of Almagro's party seditiously proclaimed that there was no other governor in Peru but Diego de Almagro. He appointed Juan de Rada his General; they committed many insolences, murders, and cruelties. They divided all the goods of the Pizarros and their friends and placed whom they listed in command, meaning to make Diego de Almagro their King.

The Emperor, hearing of those tumults in Peru, sent one Vaca de Castro, a doctor of law, with authority to punish them. And he coming thither, those who stood for the Emperor repaired to him, whereupon Almagro prepared all his forces to meet him, where they fought a cruel battle in which Almagro was overthrown, though more men were slain on the other side. Few captains escaped, and many that were hurt died, by reason of the great frost and snow that was in the country.

Vaca de Castro executed thirty of the principal offenders, and banished divers others. Almagro fled to Cusco, thinking to find relief; but his lieutenant he left there, hearing the success of the battle, apprehended him, and Vaca de Castro at his coming thither cut off his head. This Diego de Almagro was a bastard whom his father had by an Indian woman in Panama, but he was braver than the *mestizos* used to be. He was the first that ever took up arms against the King in the Indies: his followers were so loving and constant

to him that though they had often offers of pardon they would not leave him.

Vaca de Castro settled things in good order, gave the Indians content, who now begun again to cultivate their grounds which before they could not do for the wars, and about this time many mines were discovered.

The Emperor being informed of the revolts in Peru and the ill usage of the Indians, he displaced his commissioners there and chose others, giving them an oath to deal justly, and to order things uprightly. He made forty laws, and signed them at Barcelona the 20th of November, 1542. But these laws were ill taken in Peru.

He sent Blasco Nuñez Vela with the title of Viceroy, with the laws aforesaid, wherein the Emperor gave great freedom to the Indians, which discontented the Spaniards though no doubt the Emperor did it out of a good conscience. These things bred so general a discontent in the Spaniards that with one consent all the towns of Peru revolted, and made Gonzalo Pizarro their General. The Viceroy armed as much on the other side, and at first sent the bishop to persuade Pizarro, but he would admit no treaty. The Viceroy was hated of all men, and especially for murdering the King's factor, that was taken prisoner in the City of Los Reyes.

Now began great garboils, what with the imprisoning of the Viceroy and the coming of Gonzalo. But before this happened the Viceroy had imprisoned Vaca de Castro and the five commissioners that came with him out of Spain for the better appeasing of things, and sent Castro prisoner into Spain. Pizarro came to the City of Los Reyes, and caused the Emperor's commissioners to admit him for governor. Those that

had the charge to carry the Viceroy prisoner into Spain set him at liberty, which proved an unlucky service, for if he had been carried into Spain Pizarro would have agreed with the commissioners. Pizarro strengthened himself, as well by land as by sea, and sent Hernando Bachicao with fifty men, who was esteemed a coward but did much mischief. He increased his two brigantines to twenty eight ships, and came to Panama, where he did what he pleased, like a tyrant. Many, in Panama, practised to kill him, which he hearing, prevented, with the death of those that intended it, and returned to Peru with four hundred men to the defence of Pizarro, who followed his victory and put his enemies to many straits. They committed great cruelties one against another when they were taken on either side.

Pizarro hearing of the great spoils that Bachicao made at sea, and the discontents caused by his actions, took counsel how to displace him, and put in Pedro de Hinojosa in his room. Pizarro sent Hinojosa to scour the seas, lest they should make head against him, and to give satisfaction for the spoils that Bachicao had made. But they of Panama were jealous of him, till at last they agreed he should enter the town with forty men and afterwards return to Peru to Pizarro.

The Viceroy, Blasco Nuñez, and Pizarro came to a battle, in which the Viceroy was taken prisoner; and, being known to one that had served him, they cut off his head, and the next day buried him, Pizarro mourning in black for him.

After this Pizarro governed with great justice and uprightness till he was drawn into tyranny by Francisco de Carvajal and others, who would make him King, saying that they might do it because

the country was gained by them, as well as Pelayo, King of Spain, when the Moors entered it. They would have conditioned to have Hernando Pizarro, who was prisoner in Spain, set at liberty. Others proposed to bring in the Turk amongst them.

Pedro de la Gasca sent out of Spain to quell the Rebellion in Peru.

THE Emperor, hearing of the tumults in Peru occasioned by the commissioners' proceedings against the Viceroy and the insolences of Pizarro, being then troubled with his wars of Germany, chose out a milder man than Blasco Nuñez to govern in Peru, which was Pedro de la Gasca, a priest; a man whose wisdom was tried in other affairs. He went with little show or pride: the commissioners he chose to be such as he could trust, and he had the title of President. The Emperor writ to Pizarro, and dated his letter from Venloo, in Germany, in February 1546.

Gasca arrived at Nombre de Dios, and carried himself mildly, saying that he came not to make war, but, according to his profession, to make peace, and revoked the rigour of the laws that caused the war. From Panama he sent the Emperor's letters; and writ himself to Pizarro, telling him he was come to pardon all offences, to draw him to obedience, to give satisfaction to his people, and, if he refused this grace, to make war.

Pizarro was enraged at the receipt of these letters and would not suffer the gentleman that brought them to sit down, which the gentleman took for a great affront. Pizarro called for his friends to consult what answer to give the President's letter. Carvajal, the chief firebrand, was absent and therefore it was hoped he would accept of grace. Yet, every man delivering his opinion,

some advised to take and raze Panama and Nombre de Dios that the Emperor might have no place to relieve his men and shipping ; and they, having all the ships in the South Sea, might without fear enjoy Peru to themselves, and then doubted not but to make New Spain revolt too, or, at least, they would rob all the towns on the sea coast and live by spoil and rapine. Which indeed they might have done having the General of the sea true to them.

Pizarro answered Gasca's letter, by consent of thirty of his men, under their hands :—that they understood of his coming by Hinojosa, General of the sea, and the fair show of good he pretended ; but it was too late, after so many murders occasioned by the Viceroy : persuading him to return to inform the Emperor that they would receive no governor but Pizarro, and offered to send some man of quality into Spain to make their case known to the Emperor. Pizarro was devising to send to the Emperor but Carvajal would never suffer him to do so, nor to make any acknowledgement of sovereignty to Spain. They sent these letters to Gasca, and offered to give him a great quantity of money to depart home ; and, if he refused it, they writ to their Admiral, Hinojosa, to kill him. These letters being brought to Panama put Gasca in fear that he should be killed, for they absolutely refused to receive him in Peru.

Gasca dealt so wisely with Hinojosa that he brought him to submit himself and fleet and become a true servant to the Emperor. This fact was the overthrow of Pizarro ; * and Hinojosa

* Many of the details in the text are incorrectly or incompletely stated, but it is interesting to observe Monson's emphatic recognition of the fact that, at this stage, the possession of Peru depended on sea-power. As long as

was continued General and none of his captains displaced. Gasca now prepared again for war and furnished himself for his journey to Peru, and before his arrival sent a pardon to all the common sort. In his expedition he carried himself courteously, lovingly, and friendly. Gasca's carriage, and the submission of the ships, made a great change amongst the rebels; for happy was he that could appear for the Emperor. Pizarro was much grieved to hear of these alterations; but, like a courageous Captain, sent to all his friends to come to him with their forces. But most part of them forsook him, and the towns of Lima, Cusco, and the rest, took part with the Emperor.

When Juan de Acosta came to Pizarro, at Arequipa, they consulted what to do, having four hundred and fifty men in the whole country against them. He resolved to go to Chile, where never Spaniard had been, but he was followed by

Pizarro had a squadron de la Gasca was helpless to move forward, and the former might even have held Panama as an advanced post which would have taxed all the power of the mother country to deal with at that distance. Only sheer incapacity permitted de la Gasca the opportunity of winning over the officers and men at Panama, but even then Pizarro's position was not hopeless had he not, with supreme fatuity, destroyed all the vessels at Lima in silly imitation of the action of Cortes under entirely different circumstances. Well might Francisco de Carvajal, when he returned to Lima and heard what had been done, tell Pizarro that he had 'slain the guardian angels of Peru.' Pizarro was in absolute command of the sea locally, abandoned it, and with the abandonment renounced an independent sovereignty and gave her South American Empire to Spain. Nearly three centuries later Spain, in her turn, lost that Empire when the rebellious colonists defeated the royal ships and won sea supremacy on their own coasts, thus preventing the arrival of any reinforcements of troops.

Diego Centeno with a loyal party for the Emperor, between whom was fought a cruel battle. Pizarro gained the victory: he lost one hundred and twenty men, and Centeno many more. Centeno fled; but the others having so great a loss did not follow him. Pizarro, upon the victory, sent to Cusco to take those that had fled and divided his forces into several parts. Cepeda, a principal man of account on his side, persuaded him to make conditions with Gasca, which he would not do, but was angry at the motion and grew suspicious of him.

Gasca came into Peru with two thousand men, where he heard of the overthrow Pizarro had given Centeno; and his men being sickly, and finding the corn green and not to be eaten, they were much discouraged. But Centeno coming with the remainder of his forces put them into heart, whereupon he went in the pursuit of Pizarro but had great trouble in passing the river Apurimac. Pizarro, being advertised of it, departed from Cusco with a thousand soldiers. Donna Maria Calderon speaking against the tyranny of Pizarro, Francisco de Carvajal entered her chamber one morning and strangled her in her bed. Now came their armies in view of one another, every one taking advantage of the place. Gasca delayed giving battle, in hopes that most of Pizarro's men would leave him, but they did not; and he being forced by snow, cold, and hunger, engaged in the heat of the action. Cepeda, who (as I said before) advised Pizarro to accept of conditions, fled to Gasca, which much disheartened Pizarro's side. This example, and others that did the like, made most of them yield.

Pizarro seeing it, chose rather to submit than fly, and yielded himself to Pedro Villavicenzio,

the serjeant-major, who carried him to Gasca. Never such a battle was fought, in which the heads and chief commanders were doctors and scholars.

Gasca sent forces to cut off those that escaped in their way to Cusco, and to secure the town. The day following, being the ninth of April, 1548, Gasca committed the cause of Pizarro and other offenders to judges, who condemned him and thirteen more to death, whereof Francisco de Carvajal was one, and indeed the chief promoter of all the mischief in those parts. He was eighty-four years of age, and had been an ensign in the battles of Ravenna and Pavia, and at the spoil of Rome: he was soldier to the great Gonsalvo Fernandez de Cordova, and the most noted soldier in the Indies, yet never counted valiant nor skilful. It was a by-word, *As cruel as Carvajal*, because he had been the executioner of four hundred Spaniards that Pizarro caused to be put to death after Blasco Nuñez came into Peru, carrying blacks with him continually for that purpose.* Pizarro was never overthrown but in this battle, though he had fought many.

Gasca's soldiers looked for a better reward than was given them; though, indeed, they were well dealt with yet they mutinied upon it, but were soon quieted. He took a course for the ease of the Indians, and to reduce them to the Christian

* In justice to Carvajal the rule of not editing Monson's general history must be departed from so far as to say that the Spaniard was one of the two ablest soldiers at that time in South America, and that there is no truth in the story of the four hundred which grew out of one of Carvajal's humorous boasts. He was not more bloodthirsty than most of the *Conquistadores*, but his special reputation for cruelty was no doubt due to the circumstance that when he did execute any one it was with a word or two of irony.

religion, as also for the peaceable government of the kingdom.

When Gasca arrived at Nombre de Dios, out of Spain, he brought not a hundred men with him, nor money, but procured credit, and, at his going away, paid all debts and carried with him to the Emperor almost two millions, but for himself not a penny, being the first man in authority that ever did the like; for covetousness was the bane of all the Spanish affairs. No man that had commanded in Peru had escaped death or imprisonment but this Gasca. Francisco Pizarro and his brothers beheaded Almagro; Almagro's son murdered Francisco Pizarro; Blasco Nuñez apprehended Vaca de Castro; Gonzalo Pizarro slew Blasco Nuñez; and Gasca did as much to Gonzalo Pizarro. There were slain one hundred and fifty captains and men in authority, which is to be imputed to the constellation the country is seated under and the riches thereof. For the like divisions happened before the Spaniards came thither, which made a long war amongst them.

When Gasca had settled all things in good order he prepared for his return into Spain, and came to Panama, leaving much wealth there which he could not carry. But it happened that two sons of Rodrigo de Contreras, governor of Nicaragua, with two hundred soldiers entered the town and took the treasure and as much more as they could get. One of the two brothers got himself with his wealth into two or three ships, the other followed Gasca, thinking to rob and kill him. They murdered many, and slew a bishop because he writ to their father into Spain an account of their lewd behaviours: they drew to them all factious and discontented people that favoured the party of Pizarro. Gasca hearing

of those disorders, returned with speed, fought with, and overcame them. One of the brothers was drowned in passing a river : he dispatched ships after the other and took him and all his wealth. This proved a fortunate success to Gasca and got him great honour.

He embarked at Nombre de Dios for Spain in 1550, with much wealth for others and reputation to himself : his going, coming, and staying, was little more than four years. The Emperor made him bishop of Palencia, and sent for him to Augsburg, in Germany, where he then lay, because he would be informed by word of mouth of all proceedings, and the state and condition of the people of the Indies.

This shall suffice for so much as concerns the beginning, progress, and conclusion of the Spanish conquest of Peru, which were full of difficulties, hazards, and cruel murders among themselves. For what concerns particular men, towns, and countries, I refer you to divers authors, as well in Spanish as English ; and will now proceed to the conquest of Mexico, by that renowned and fortunate gentleman Don Hernando Cortes.

The Exploits of Don Hernando Cortes, Marquis del Valle de Oaxica.

Hernando Cortes was the son of a gentleman, but of small fortunes; and, seeing his father could not maintain him in the port of his birth, he desired to put himself into the world, so, with his father's blessing, and little help otherwise, he made shift to get into the wars of Italy, where he stayed not above a year through want and sickness. And, being forced by necessity to return for Spain, was forced to beg till he got to Seville, knowing his father's circumstances could not relieve him at home. Not long after his arrival at Seville there happened a fleet to depart from thence to the Indies in which he procured a passage. And, being taught to write and read, put himself into the service of a scrivener, and by degrees, through his own industry, advanced himself to perform those actions you shall read in the following discourse.

After running through several employments in Española and Cuba, he became familiar and intimate with the governor of that island, Diego Velazquez. This governor, upon the report of the wealth of Yucatan, had sent his nephew Juan de Grijalva, to discover along that coast; who returning with a promising account of the riches, not only of that coast he was sent to but that afterwards called New Spain, Velazquez fitted out a fleet at his own expense to conquer that country and gave the command of it to Cortes

whom, upon second thoughts, he designed to have removed. Which Cortes having intelligence of he hasted away with his fleet upon his discovery.

Being arrived at Vera Cruz, and receiving there information of the vast wealth of the King of Mexico, he set forward towards him on the 16th of August, 1519, with five hundred foot, fifteen horses, and one thousand three hundred men of that country who served for pack horses.

After four days' march he came to a goodly country, called Chinchecas, but before he came thither he had passed high hills, full of snow and ice, though it was in August. Next he came to Tlascala, a people who were enemies to the Mexicans. Cortes overthrew them in three conflicts: the town had twenty thousand houses, very fair, and handsome markets and fairs. Cortes took it by night, and returned to his camp where he found his men in mutiny; but appeased them, out of hope they should spread abroad the gospel of Christ. From thence he went to Cholula, a country no less fruitful, where he was entertained with their kind of music, but they were set on by the King of Mexico to betray him which was discovered by an Indian woman, and Cortes suddenly set upon them and overcame them. The King of Mexico sent to excuse himself of this treason and to lay it upon the people of the country. He sent to invite Cortes to Mexico, and as he passed the country he was well entertained, especially in Ciutlahuac and Chalco, the one friend, the other enemy to the Mexicans.

When Cortes came within half a mile of Montezuma, the King sent a thousand courtiers, all in one garb, to meet him, who saluted him one after another, first touching the ground with their fingers and kissing it. Then came

Montezuma with two hundred better apparelled, two and two together, without shoes, though they use shoes at other times. He leaned upon two of his nobility to show that he was upheld by his nobles.

Cortes was told he must not touch the King, for that it was the custom of the country. He presented the King with a chain of bugles,* and some diamonds in it, which the King took in good part, and gave him in requital another of gold wrought in snails, crabs, and such toys. He lodged Cortes in his palace with great solemnity, and made liberal provision for his army. The King erected a curious throne of state where he directed his speech to the Spaniards, as follows:

'Noble soldiers, and merciful captains to them that yield, you are welcome into this country of ours. I would have you know that our forefathers have told us, and our chronicles declare it, that we are not anciently of this land wherein we live, but brought hither by a King, who left us here because we refused to return with him in company. Our forefathers married, had issue, built houses, which we enjoy; and we have ever been of opinion that they will come to us again and make us subjects to them, as they have formerly been to our ancestors. And therefore considering from whence you come, and that you are sent from a great King, we yield to you all obedience and service, and make account you are entered into your own houses.

'I am not ignorant of what hath happened to you by the way, and that the Cempoalans have spoken ill of me; they are my enemies, and I pray you believe them not. I know they tell

* Glass beads.

you my houses and walls are gold, and that I make myself a God: but I pray you behold my houses that are made of wood, lime, and stone, and myself a fleshly man like others. Indeed I have plate from my ancestors, and what I have shall be yours. I must now depart, but will so provide that neither you nor yours shall want.'

Cortes answered, 'that what he said was true, and that the King of Spain was the King they looked for; and that he was sent thither purposely to let them know so much.' After they had passed six days in great jollity Cortes had news that some of his men were murdered by the King's appointment; for which he was glad, thinking to take that occasion to subdue and conquer him and his country. Cortes sent for the malefactors and put them to death: they accused Montezuma, whom likewise he imprisoned but within a while after he set him at liberty: he confessed his fault and promised his allegiance ever after. The King chose rather to dwell in the palace with Cortes than at pleasure abroad. To give him satisfaction he sent to discover mines for him, and procured a great quantity of wealth to present him. He wished and advised his nobles to obey Cortes, and laboured how he might subdue Cacamatzin, his vassal, who wholly refused to submit to Cortes. This act of his was affirmed by public notaries in writing by the consent of all the nobility, and interchangeably given to one another.

Velazquez, the governor of Cuba, envying Cortes, sent Pamphilo de Narvaez, with eighteen sail of ships, to command Cortes to go out and quit Mexico. Whereat Cortes was amazed and in a dilemma; for if he made head against Narvaez

the Indians would presently have revolted, and if he did not, Narvaez would in time possess himself of the country. Wherefore he resolved with one hundred and seventy men to go against Narvaez, leaving a garrison in Temixtitan,* which he commended to the care of the King. Narvaez had fourteen hundred Spaniards and twenty great pieces; nevertheless Cortes set upon and took him, and the rest yielded themselves.

In this interim, the citizens of Temixtitan revolted against the King and Spaniards, and assaulted the castle, alleging their dislike to the Spaniards was for breaking down their idol.

Cortes hastened thither with ninety six horse, and twelve hundred foot soldiers, which gave heart to them in the castle. The Indians were desperate and desired rather to die than live: they put Cortes to a retreat, which emboldened them much. Cortes afterwards used many engines and other inventions, and though he slew multitudes of Indians yet they valued it not. Montezuma looking out of a window, thinking to dissuade the people from their violent courses against the Spaniards, was struck with a stone, of which wound he died within three days. He was a man of a good nature, wise, and prudent. The Spaniards gave the Mexicans his body to bury, and offered the Indians conditions of peace, which they wholly refused, vowing to thrust the Spaniards out of their country though it were with the loss of 1000 men to one Spaniard. Yet within a day they deceitfully made a proposition of peace which Cortes accepted of; and, to give them the more content, he set a priest of theirs at liberty thinking it would have wrought more

* The city of Mexico.

heartily. But the day following, when Cortes had the least suspicion of them and sat quietly at dinner, they attempted one of his houses. Whereupon he suddenly rose from table, and with his horse charged the Indians, where he lost divers men and was himself sore wounded and scarce able to retire. It was now come to that pass with the Spaniards that they must either perish or quit the city; and that night they resolved to fly with Montezuma's children and treasure. But the Indians, having notice of it, pursued them, recovered the prisoners, slew four hundred and fifty Spaniards, forty six horses, and four thousand Indians that took their part. Now did Cortes endure great misery and famine, and had but one dead horse to feed on in five days till he came to Tlascala. The Tlascalans entertained him courteously, where he stayed ten days. He built many fortresses for his own safety and theirs, and sent for aid into Española. In the mean time he gained the love of many Indians who took part against the Mexicans.

Cortes built thirteen boats; and, on the other side, the new King of Mexico prepared for war and made certain pikes to annoy the horses, which they feared more than the men. Cortes cut a passage into the salt lake for his boats to have a passage to the siege of Temixtitan: these ships intercepted all provision and annoyed the Indians infinitely. Cortes assailed the town in four places, having in his army one hundred and twenty thousand men; some came for fear, some for liberty, some for friendship, some out of gain. This siege lasted ten weeks, and wasted one hundred thousand people with famine and other misfortunes. Cortes by chance took the new King as he was stealing away secretly by the lake. He subdued Temixtitan and

fourteen towns by the lake side, as also all the Mexican realms and provinces, to the Crown of Spain, giving great spoil to the soldiers and reserving the fifths to the King.

Cortes deserved more honour than all the rest of the Spaniards for his conquest in the Indies. He subdued New Spain and gave it that name because it was like Spain. He may very well be compared to Marius and Scipio in the Roman State: his house remains great to this day, and has the title of Marquis del Valle, which he left to his posterity.

Cortes being afterwards Captain-General, and Don Antonio de Mendoza Viceroy of New Spain, the one hated the other but yet they joined together for the finding out of the passage from those seas to ours which we properly call the north-west passage; as also in the conquest of Cybola and Quivira, where they were persuaded by certain friars that the people worshipped the cross and had other tokens of Christianity. But all proved false, and few Spaniards returned home, their misery was so great and the country so cold and barren, the people cruel, and five hundred leagues from Mexico. Upon this coast, they write, ships have been seen that came from China or Cathay, their prows gilded, and made signs that they had been thirty days in coming. The Spaniards endured more misery and travail in this discovery than in any one they undertook.

Cortes, after his taking Mexico, sent to discover the southern parts, and his people arrived in a country where the Cacique of Tehuantepec was King, who received them lovingly and sent an ambassador to Cortes, thinking he was come out of the clouds and that their vessels were great whales. They wondered at their horses

and accepted a friendly peace, offering Cortes fifty thousand men to assist in conquering the Cacique of Tutepec, who was his enemy for using the Christians well.

Notwithstanding the deserts of Hernando Cortes he was afterwards called from his command, and at his arrival in Spain was unworthily dealt withal.

He afterward went the unfortunate journey with Charles the Fifth to Algiers, not having any command nor being so much as admitted a counsellor of war. In that expedition he lost two emeralds in the field, which could never be found again, valued at one hundred thousand crowns. He died the same year, and much about the same time that Henry VIII., King of England, died.

The Names of the first Governors of the Island Española, where the Spaniards made their first Habitation, and from whence they discovered other Parts of the Indies and Main Land; with an Account of all those Discoveries.

CHRISTOPHER COLUMBUS was governor eight years; during which time he and his brother Bartholomew conquered and peopled the greatest part of it and made it beneficial to the King.

Francisco de Bobadilla succeeded Columbus, and sent him prisoner into Spain; he governed three years, and well.

Nicholas de Ovando was next, and went thither with thirty ships, into which Bobadilla put all the wealth he had got for himself and the King, which was the greatest the Indies had afforded till then; but all these ships with their wealth, except six, were cast away in a storm. Ovando was a religious man and governed eight years with much wisdom. When he went thence he was so poor that he was forced to borrow money for his expenses, though his revenue was two thousand pounds a year. He would not suffer any man of evil life to live among them. He conquered some provinces that were beastly people and had no breeding, and quieted others, and was made a commander of the order of Alcantára when he returned home.

Diego Columbus governed six or seven years but was removed, and in disgrace with the King,

with whom he had several years' suits for his father's rights in the Indies.

Fray Luis of Figueroa, prior of the monastery of La Mejorada, was sent by Cardinal Ximenes, who governed after the death of King Ferdinand and his Queen. He took from the courtiers all their Indians because, they being in Spain, their servants used the Indians very ill. He put them to school to be instructed, but many of them died of the small pox which disease the Spaniards brought in amongst them. In his time the planting of sugars in that island was much improved.

After him went Don Sebastian Ramirez de Fuenleal but with the title of President, which still continues.

The first bishop of San Domingo was Fray Garcia de Padilla, a Franciscan. Many miracles were wrought in the first conversion of the Indians. The first Archbishop of San Domingo was Alfonso de Fuca Mayor.

In the island the Spaniards found no sort of four-footed beasts, except three sorts of coneys; but they have now all sorts of cattle, and of one cow there came eight hundred in twenty six years. Many of the dogs the Spaniards carried turned wild and did more harm than wolves; and the cats they carried out of Spain would not caterwaul there.

The Islands of the Lucayas.

These islands are four hundred in number,* lying to the northward of Española, and the first discovered by Columbus. The people are fairer than in Cuba, and Indians used to come from other

* There are 36 islands, 687 cays, and 2414 rocks or reefs in the Bahamas.

places to live with those women. They had no flesh; and when the Spaniards carried them to Española, and gave them flesh to eat, they died. They thought that when they died they were carried into the northern regions, and from thence to paradise in the south.

Seven inhabitants of Española, amongst whom was Lucas Vasquez de Ayllon, a scholar, and auditor of the island, fitted out two caravels at Puerto Plata, in the year 1520, to fetch Indians from the islands of Lucayas to work in their mines; but they found no men there, and therefore resolved to go northward for some because they would not lose their labour. They came into thirty two degrees, where is now cape St. Helen, and the river Jordan.* The Indians took their ships for great fishes and entertained the Spaniards well, who brought away two of those Indians who came to see the ships; one whereof was cast away in one of the caravels, the other, out of grief, starved himself to death.

Lucas Vasquez, by the report of an Indian, supposed the country to be rich, and therefore went into Spain to beg leave of the Emperor to conquer it. Leave was granted; and he being made a knight of the order of Santiago, returned to San Domingo, where he fitted out some ships in the year 1524, but his Admiral ship was lost in the river Jordan, with many men. And this was his end.

San Juan de Puerto Rico, or Borriquen.

The people of this island were braver than those of Española. Columbus discovered it in his

* Supposed to be St. Helen's Sound and the R. Combahee in South Carolina.

second voyage, and Hernan Ponce de Leon went to inhabit it in 1509. The King and Queen received him courteously and became Christians. At first they thought the Spaniards were immortal; wherefore, to try it, by consent they drowned one Salcedo, whom they much feared. And seeing he died when they threw him into the water, they took heart, revolted, and killed five hundred Spaniards. They much dreaded a dog called Beçerrico; his master received pay of the Emperor for him, and the dog did great service. He would distinguish betwixt the Indians that were friends and foes; at last he was killed with a poisoned arrow. The first bishop of this island, was Alonso Manso, in 1511.

Florida.

The Admiral, Columbus, taking Hernan Ponce de Leon from his government at Borriquen, and he being left without command, and rich, fitted out two caravels, and not finding the island Bainco, where the Indians told the Spaniards there was a well that made old men young, he discovered the coast of Florida on 27th March 1512, being Easter Day. He fitted out three ships at Seville, came to Guadalupe, where putting men ashore for wood and water and to wash their clothes the people of that island slew them. Thence he went to Florida, where the Indians, standing on their guard, wounded him and many more, and he died of his hurt at Cuba after losing much of his wealth. He sailed with Columbus in the year 1493, and was a good officer and did good service.

Hernando de Soto, who had been in the wars of Peru and was grown rich by the ransom of Atahuallpa, desired the conquest of Florida,

whither he went, and spent five years in the attempt. But he and all his men died without doing any thing.

After the death of this Soto many sued for the conquest of Florida, and in 1544 Julian de Samano and Pedro de Ahumada begged it. But the Emperor, thinking it no good course to convert the Indians by force, sent several friars to convert them, but the Indians killed four of them at their first landing.

Panuco.

Fifty leagues from Florida is the river of Panuco. The first discoverer of it was Francisco de Garay, who only sailed along the coast; but he that undertook the conquest was Pamphilo de Narvaez with the title of Adelantado. He sailed from San Lucar with five ships, six hundred men, one hundred horses, and all other provisions, in the year 1528, and suffered much by the way through the ignorance of his pilots. Yet he proceeded with three hundred men; but his fault was that he did not inhabit where he landed, which is folly in any undertaker not to do. Of the three hundred Spaniards that went ashore with him, only four lived, who wandered ten years up and down naked and wrought many miracles; as healing of diseases and raising a dead man to life. This Narvaez was he that went to oppose Cortes in New Spain. A Morisco foretold it to him that his fleet should have an ill end and that few should escape.

Francisco de Garay fitted out three caravels at Jamaica, in the year 1528, intending to attempt Florida, which they thought to be an island; they were more willing to inhabit islands than the

continent. Attempting to land, all his men were either killed or hurt; but he got to Panuco and returned to Jamaica, where he refitted his ships and recruited his forces but had worse success than before. He vied with Cortes, hoping to gain as much honour as he had done, because the country promised well. He therefore provided eleven ships, with seven hundred men, one hundred and fifty horses, and all necessaries, and sailed to Panuco, where he lost all but himself, who escaped to die afterwards at Mexico. Nuño de Guzman was likewise governor of Panuco; he carried but two or three ships and eighty men, and yet revenged the slaughters the Indians had made.

Jamaica.

Columbus discovered Jamaica in his second voyage. His son Diego conquered it when he was governor of Española. Francisco de Garay was the richest governor it ever had but for his loss in the expedition to Panuco. This island breeds the best hogs in the Indies: the chief town is called Seville. The first abbot it had was Peter Martyr of Anghiera, who writ the Decades of the Indies.

The discovery of New Spain is before, with the actions of Cortes.

Cuba.

Was discovered by Columbus, and called Fernandina, from King Ferdinand. Nicholas de Ovando began the conquest of it when he was governor of Española: the chief town and port in it is the Havana. The first bishop was Hernando de Mesa, a Dominican. Many miracles

were wrought in this island, by which means it was the sooner subdued.

Yucatan.

Francisco Hernandez de Córdova discovered it Anno 1517, having one hundred and ten men with him. Here landing at Champoton to take water he was opposed, and had twenty men killed, fifty wounded, as he was himself in thirty three places, and two taken whom the Indians sacrificed. He returned to Cuba in great melancholy, but glad that he had found such a fruitful country.

Francisco de Montejo went next to conquer it, with five hundred Spaniards, in ships of his own, and built a town called Santa Maria de Vitoria. Here he endured much hunger, travail, and danger, but outlived them and continued twenty years, marrying an Indian woman and following the customs of the Indians. He refused to go with Cortes upon his conquest.

His companion Geronimo de Aguilar peopled Campeachy, Merida, Valladolid, Salamanca, and San Lucar, where he lived quietly and peaceably with the Indians, who in this place worshipped the cross and had temples and altars. Which made the Spaniards conceit that some of the Goths fled thither when the Moors subdued Spain.

Honduras.

Columbus discovered all this coast, thinking to find a passage into the South Sea which he supposed to be there. Francisco de las Casas founded Truxillo, in the year 1525, by order of Cortes. Here the Spaniards imprisoned and killed one another.

The people are ill natured, but very obedient to their masters. The first bishop's name was Christobal de Pedraza: the first governor was Diego Lopez de Salcedo, killed by his own people. Next to him was Vasco de Herrera, who they likewise slew, and other governors that succeeded him.

Nombre de Dios.

The country about it was called Veragua, discovered by Columbus, Anno 1502. Diego de Nicuesa, who went with Columbus in his second voyage, obtained the government of it, and fitted out in Spain nine vessels, with seven hundred and eighty men in 1508. He coasted along to Cartagena, where he found the company of Alonso de Ojeda, his great friend, in distress, the Indians having killed seventy of his men; which they revenged, entering their houses by night and killing and taking them all prisoners.

After this, Nicuesa passed from Ojeda with two caravels, appointing the rest to follow him. Lope de Olano, who had the command of a vessel, missed of him and went to seek him in the river of Chagres. There they went ashore and sunk their vessels, intending to make it their residence, and chose Olano for their General till the coming of Nicuesa. Three of Nicuesa's men came to them in a boat, telling them where he was, and that he had lost his two caravels and endured great hunger for three months.

Olano hereupon sent one of his boats to fetch him out of that misery; but when he came to them he basely imprisoned Olano, accusing him of usurping command and destroying the ships. He would not stay here, though they were within three months of reaping their corn,

for fear Olano should have the honour of the undertaking.

Out of the other bark they made a caravel and went to Puerto Bello, so called by Columbus because of its goodness. Here the Indians slew twenty of his men. He left half his company and went away to Cape Marmol, where he built a fort, calling it Nombre de Dios. Of seven hundred and eighty men he had not above one hundred left alive. Here grew great contention between Vasco Nuñez de Balboa and Martin de Enciso about the command; which was the cause they landed not, but returned.

Nicuesa, seeing they were gone, went to Española to complain but was drowned by the way. But first he went ashore by the way and writ on barks of trees, which were afterwards found, *Here went lost the unfortunate Diego de Nicuesa.* He was the first that discovered Darien, where he was reduced to such extremity, that his men were forced to eat dogs, toads, and one another. After this Felipe Gutierrez desired the government of Veragua, but with no better success, by reason of famine: this was in the year 1536.

The Admiral, Luis Columbus, sent Christopher Peña to people there, who suffered much by famine. By agreement betwixt the King and Columbus he was created Duke of Veragua and Marquis of Jamaica, Anno 1536.

Darien.

Ojeda, Nicuesa, and Rodrigo de Bastidas, as you have heard, were the discoverers of this country. And after many calamities, mutinies, famine and other misfortunes, Ojeda died a friar at San Domingo and left Francisco Pizarro his lieutenant.

In 1500, Bastidas fitted two vessels at Cadiz. He had been with Columbus in all his voyages, but lost his ships at San Domingo by the worm that eat them. He was imprisoned by Bobadilla for trading with the Indians without leave, but the King gave him two hundred ducats a year in lieu of Darien. When those Indians fought with the Spaniards they would put gold at the end of their arrows, thinking they would stoop for it and they might kill them.

Pizarro seeing the fifty days expired, wherein Ojeda had promised to return (who, as was said above, was become a friar), being in great want of victuals left that country and put to sea with two caravels. One of them was cast away in a storm, and the other had her rudder struck off by a fish, which made them all conclude themselves lost; but by good luck they got to Cartagena almost starved.

In his way he left Enciso, whom Ojeda had left to follow with victuals. Pizarro told him how Ojeda was turned friar, but Enciso thought it was an invention of his own and that Pizarro had fled from him. But, being satisfied, he caused him to return though Pizarro offered him two thousand ounces of gold not to go back, the country was so unfortunate.

They landed at Comogra to take in water, and though the Indians were man-eaters yet they used them kindly when they understood that neither Ojeda nor Nicuesa were there. Going into Uraba their ships struck, and their mares, hogs, and all they had, were lost.

This disaster made Enciso desperate, thinking they must all perish; and they all swore to one another rather to die by the hands of men than by hunger. They landed with one hundred men

and were beaten. Thence they went to a country close by, and built a village, calling it S^ta^ Maria de la Antigua del Darien. At first the Indians were quiet, but afterwards became their enemies, whom they overcame and possessed much wealth of theirs.

Now began great factions between Enciso and Vasco Nuñez de Balboa. Nuñez refused to obey him, or pay the King his fifths; and thus they continued a year.

Roderigo de Colmenares went with two caravels from San Domingo to relieve Ojeda's men. And after many dangers he arrived at Cienega and put fifty five men ashore, whom the Indians slew, excepting seven that hid themselves in a tree but they were taken and eaten. Colmenares, fearing the Indians would attempt his caravels, removed to the Gulf of Uraba, and firing his guns was answered with fires by the Spaniards ashore. There was great joy for their meeting; and all of them made up one hundred and fifty men, a sufficient number against the Indians.

The factions continued; and to appease them Colmenares advised that Enciso should govern, he having the King's patent for it. Vasco Nuñez refused, and would not allow of it, but afterwards took Enciso and confiscated all he had. Enciso got into Spain to complain of him, and obtained a severe judgement against him, but it was not executed because afterwards Vasco Nuñez was the cause of finding the South Sea and all the wealth obtained by it. Vasco Nuñez had done many other good services, and conquered Golden Castile.

Vasco Nuñez having gotten the absolute power endeavoured to govern well, and had two hundred and fifty Spaniards inhabitants in the town of

S^ta^ Maria de la Antigua del Darien. With one hundred and thirty of them he went out to find victuals for the rest: an Indian King refusing him relief, he took two of his wives and children and carried them away. In the plundering the town he recovered three Spaniards that had been taken of Nicuesa's company, who told him how well that King had used them. Whereupon he released his two wives and children, and took their oaths to aid him against Poncha, their enemy, and to relieve them with victuals.

Vasco Nuñez sent his friend Valdivia to San Domingo for more men, because the country promised gold, and with him a process against Enciso. He sacked a town two leagues up the country, where he had gold but could not take Poncha; and fearing to be so far in the country without more help he returned to Comogra and made peace with him. Comogra had a fair-built house, plenty of victuals, and lived in a civil manner. He had seven wives and seven children; his eldest son gave him seventy slaves to serve the Spaniards, and much gold. As they were weighing the gold two Spaniards fell out, which the King, observing, he struck down the scales, saying, 'If I had known, Christians, you would 'have fallen out for my gold I would not have 'given you any; for I love peace, and I wonder 'that you who are friends should fall out for so 'vile a thing. If your country be so civilized as 'you report, it had been better you had kept in it 'than to come so far to quarrel. We live here 'and content ourselves with indifferent things, 'and you call us barbarous, but we will not kill 'one another for gold. But I will shew you a 'country where there is gold enough.'

The Spaniards were astonished to hear the

young man talk so rationally, and caused the three Spaniards that were taken to ask how far that country he promised was off, and how called. He told them seven days' journey, and that the name of it was Tubanamá, but advised them to carry more men because the way was mountainous and the people men-eaters.

Vasco Nuñez, hearing him talk of another sea, embraced him with great joy and besought him to become a Christian; which he did, and was baptised by the name of Carlos. He was a great friend to Christians and promised to go with them to the other sea, provided they would carry a thousand Spaniards, for fewer would not conquer Tubanamá. If they mistrusted him, he offered to go bound; and if he told a lie then they should hang him. And this was the beginning of the discovery of the South Sea.

Vasco Nuñez returned with great joy to Darien and divided his wealth. The King's part came to fifteen thousand pesos, which was cast away going to Spain, being the first loss the Spaniards had in those countries. Vasco Nuñez endured great misery, the corn they sowed being spoiled with rain. Men were sent out with great danger for food who returned with gold, but all full of sores made by the biting of gnats.

Colmenares went another way with seventy men; they met together and went among the people that live upon trees. The Spaniards desired a peace with them, which they refused, relying on the height of their trees; but when the Spaniards offered to cut them down which they imagined they could not do, till they saw it, they then offered them peace and victuals. Gold they did not use but promised to fetch some, yet came not again, being gone to persuade other Kings to

join with them against the Spaniards. They gathered five thousand men in boats, which was discovered by a woman Vasco Nuñez had with him. He prevented their treason and slew most of them, and they never after attempted any treachery against the Spaniards in those parts. Colmenares was sent to the Emperor with this news; but his wife they kept as a pledge. Colmenares had been a soldier under the Great Captain.

Juan de Quevedo, a Franciscan, was the first bishop of Antigua, in Darien, and the first priest that ever was in that New World. Vasco Nuñez was a gentleman by birth, industrious in war, and beloved by his soldiers. This country is unwholesome, subject to much rain, and many were there killed by thunderbolts.

Cenú

Is a river, a town, and port secure, ten leagues from the sea, which has a good trade for fish. The Indians there work their plate curiously. Rodrigo de Bastidas discovered it Anno 1500, but Ojeda and Enciso did most good there.

Enciso, being ready to give battle there, told the Indians they were Spaniards, and peaceable men, who came thither from afar in great danger and desired victuals. The others answered that there was little sign they were such men and desired them to begone, for they would admit of no stranger among them. The Spaniards persuaded them to own the true God, and told them that country was given them by the Pope, who had the command of souls, and that they came to take possession of it. They answered, laughing, that they approved of the service of one God but

would not dispute of religion; that the Pope was very free of what was not his own but had nothing to do with them; and that either the King of Spain was very poor, to desire their country, or very bold to threaten them; and that if he came thither himself they would set his head upon a pole. To conclude, they engaged, and the Spaniards overthrew them with the loss of two men.

Cartagena.

Juan de la Cosa, who was pilot with Bastidas in 1500, set out four caravels, offering to subdue the Indians of this place. He came to Cartagena, where he found Captain Luis Guerra; they joined together, and took seven hundred men, and returned without doing any great matter.

Pedro de Herredia went governor with a hundred men, forty horses, and three caravels in 1531. He peopled it; but a mutiny happening among the Spaniards, he and his brother were brought prisoners into Spain.

The people here are taller than in any other part of the West Indies. They are now Christians and have a bishop.

Santa Marta.

Rodrigo de Bastidas discovered this land and governed it in 1524, but it cost him his life; for his soldiers mutinied against him because he would not give them the spoil of gold, saying he valued the Indians more than them. His death was procured by his friend Pedro Fuentes, who thought by his death to rule all.

Don Pedro de Lugo succeeded him, and after him his son, both of them exceeding covetous.

Here Pedro Arias de Avila landed, when he went governor to Darien, and had a great engagement with the Indians, who were much daunted at the cannon firing from the ships, for they thought it had been thunder and lightning.

New Granada

Is eighteen leagues from Santa Marta, and was discovered by Gonzalo Ximenez de Quesada. He found out the mines of emeralds, by means of the King of Bogotá, who used the Spaniards civilly. This King had forty wives; his subjects were obedient to him, and would not suffer him to spit on the ground. They kept a Lent two months in the year, during which time they were not to know woman nor eat salt. In 1547 the Emperor sent a governor to New Granada.

Venezuela.

The first governor here was Ambrose Alfinger, a German, in behalf of some merchants the Emperor mortgaged it to in 1528. He was killed, and his men reduced to such misery that they eat three Indians. Georg von Speier, another German, succeeded him.

Queen Isabel would not consent that any but her own subjects should go to the Indies, but after her death the King gave leave to the Aragonians. The Emperor opened this gap to strangers, by this contract with the Germans, yet now none can go but Spaniards.

Venezuela is now a bishopric; it is so called because seated like Venice. The women are more familiar than in any other part of the Indies but their religion and attire are no better.

Cumana and Cubagua.

Cumana is a river that takes the name of the province. Here was a great fishery for people, and certain friars built a monastery in the year 1516, Juan Garces being their vicar. Three of them went to convert the people up the country but were slain ; yet afterwards the others brought the people to civility and their children to learn. Thus it continued two years ; at the end whereof they revolted and slew one hundred Spaniards, entered the town, destroyed the monastery, and killed all the friars.

Diego Columbus, being governor of San Domingo, sent three hundred Spaniards to revenge this wrong under the command of Gonzalo de Ocampo. At his first coming he pretended to the Indians that he came out of Spain, which emboldened them to come aboard him. When he had as many as he thought fit he seized them, made them confess all their villany, and compelled them to build the town of Toledo which is within half a league of the sea.

When the aforesaid monastery flourished Bartholomew de las Casas, a priest that had lived in San Domingo, begged the government of this country, promising the Emperor more wealth and that the Indians should be better used than before. By means of Count Nassau, and other Flemings, he obtained it, promising to send them store of pearls. He was furnished at the King's charge, and carried three hundred labourers, with every one a cross on his breast like a knight. At his coming he found Ocampo there, and the country in another condition than he had expected. He required Ocampo to obey him, which he refused till he had orders from Diego Columbus, who

employed him, and would not allow him to come into his town of Toledo but obliged him to build a great barn of clay without, for his labourers. Both went to San Domingo to complain; by which means Toledo was unpeopled. Which the Indians taking the advantage of, they entered upon the clay house and left not a Spaniard alive where before it was well peopled, being the chief fishing place for pearl. The priest, hearing thereof, became a friar and never sent the Flemings the pearls he had promised them.

The loss of the pearl fishery was a great damage to the King. But Columbus sent Jacomé Castellon, with a number of Spaniards, who made amends for the follies of the other two, recovered the country, built a castle at the mouth of the river, and set up the pearl fishery at Cubagua, where New Cadiz was built. This island was but two miles about, and barren in those days, but yielded to the value of two millions in pearls. There is a sweet and medicinal spring in it. At some times of the year the sea is red, which they impute to the breeding of oysters and purging of women. They say here are mermaids. This island of Cubagua was discovered by Columbus, which was the cause of his disgrace, being accused for concealing pearls he took there.

Vicente Pinzon, and Adrian his nephew, growing rich in their voyage with Columbus, fitted out four caravels, and had leave to discover those countries where Columbus had not been. They came to cape St. Augustine, where they found people as big as Germans, and had experience of their valour for they slew eight Spaniards. Yet he brought away thirty Indians and much Brazil wood, but lost two caravels, men and all, having spent ten months upon the voyage.

Orellana and the Amazons.

This is counted the famousest river in the world, rises in Peru, has many islands in it, and flows a hundred leagues into the country. The man that gave an account of it was Francisco de Orellana, lieutenant to Gonzalo Pizarro.

Orellana being in Peru, was sent by his captain to seek victuals, and, being in a boat, was carried with such swiftness by the current that he could not return to Pizarro. He carried with him much wealth and came out into the north sea down that river. From thence he sailed into Spain, where he sued for employment and undertook that voyage to the river of Orellana. He stayed in Spain till all his wealth was spent, and then married, and drew his wife's friends to venture with him. He gathered five hundred men, but unfortunately died at his going to sea and that enterprise was never after attempted. He reported he met with Amazon women but it was not believed. It is supposed that Marañon and Orellana have both their beginning out of one river in Peru, and that the latter is fifteen leagues over where it falls into the sea.

Diego de Ordaz, who had been a captain with Cortes at the conquest of Mexico, was sent thither with the title of Adelantado, carrying six hundred Spaniards, and thirty five horses; but the enterprise failed by his death.

Geronimo Ortillano was sent afterwards with a hundred and thirty men, in the year 1534, who arrived not there but stayed and peopled at San Miguel, Benevente, and other places.

The River of Plate.

From cape St. Augustine to the river of Plate is seven hundred leagues. Some attribute the

honour of discovering it to Amerigo Vespucci; but it was Juan de Solis, in 1512, who returned into Spain with his ships laden with Brazil wood and obtained the government of the river of Plate; but landing with some men, he and they were all slain in 1516, yet his ships returned safe. In the year 1526 Sebastian Cabot, in his voyage to find the Molucca Islands, of which he failed, arrived at the river of Plate with four ships, at the Emperor's charge. In Brazil he found some Frenchmen trading. The Indians killed two of his men but would not eat them, saying they were soldiers. Cabot returned into Spain with little credit, though he was not to blame because his men were in fault.

Don Pedro de Mendoza went to the river of Plate in 1535, with fourteen ships and fifteen hundred men, a greater number than ever had been carried to the Indies at one time. In the way thither he sickened, and in his return died.

Alvar Nuñez Cabeça de Vaca was sent Adelantado to the river of Plate in 1540, with four hundred men and forty six horses. He could not agree with the Spaniards Don Pedro left there, nor yet with the Indians, so that they sent him prisoner into Spain.

John de Sanabria was bound to carry three hundred men, at his own cost, to the river of Plate; but he died at Seville and his son went.

Fray Bernard de Armenta, and four others, went to the river of Plate, and by the way fell upon an island where they found three of Cabot's company who had learned the language, and by their means they converted the savages wonderfully.

Four years before this an Indian, called Orignay, had proclaimed in those parts that shortly there

would come Christians and preachers among them; advising those people to receive them, for they were holy and would make them leave their beastliness. He made songs to that effect which they sung; and this proved a great help to their conversion, for they entertained the friars as if they had been Gods.

For the better Understanding of the Circuit of America, I will here set down a Rutter of the Distance from Haven to Haven, and Cape to Cape; and will begin with the northern Regions.*

	Leagues
From Greenland to the river Nevado † .	200
From thence to Maluas ‡ . . .	200
From thence to cape Marso § . . .	70
From thence to Delgado ‖ . . .	50
From thence to Granzio ¶ . . .	200
From thence to Bacallaos	200
From thence to cape Florida . . .	800
From Bacallao Bay to Rio ** . . .	70
From thence to the Bay of the Islands .	70
From thence to Rio Fondo †† . . .	70

* To identify all the ancient names by their modern equivalents would be the work of an expert geographer, and would necessitate the consideration and discussion of many doubtful and controversial points, thus devoting much space to that which is not naval history and is only of secondary interest to members of the Society. The Editor has therefore only, for the most part, corrected, by comparison with sixteenth and seventeenth century maps, the printed version, but his readings are no doubt open to criticism in some instances. The distances given in the text are mostly fantastic but are left unaltered.

† The river Nevado is shown in 'Estotiland' in the *Theatrum Orbis Terrarum* of Abraham Ortelius (Antwerp, 1570).

‡ Cape de Baixos. § Cape Marco (Labrador).

‖ Cape Grato (Newfoundland). ¶ Grand Bay.

** Blank in MSS. †† Bay of Fundy.

	Leagues
From thence to Rio Gamas *	70
From thence to cape Sta. Maria	70
From thence to cape Baxo †	40
From thence to Rio de Sto. Antonio	100
From thence to cape Arenas	80
From thence to port Primo ‡	80
From thence to Rio Jordan	70
From thence to cape Sta. Helena	40
From thence to Rio Secco	40
From thence to Labruz §	20
From thence to Cona ‖	40
From thence to cape Florida	40
From thence to Ancon ¶	50
From thence to Nilves river **	100
From thence to Flores ††	20
From thence to Santo ‡‡	70
From thence to Pescadores §§	70
From thence to Rio Palmas ‖‖	100
From thence to Panuco	30
From thence to Vera Cruz	70
From thence to Alvarado ¶¶	30
From thence to Casinado ***	50
From thence to Grigalda †††	50
From thence to Redando ‡‡‡	80
From thence to Yucatan	90
From Florida hither is accounted	800
From thence to Rio Grande	100
From thence to cape Cameron	150
From thence to cape Gratioso §§§	70

* In 'Norumbega.'
‡ Portus Principis.
‖ Cape Canaveral.
** River Nueces.
‡‡ Rio del Espirito Santo.
‖‖ Rio de Palos.
*** Unidentified.
‡‡‡ Puerto Escondido.
† Cape Santiago.
§ Cape de Cruz.
¶ Arenas (Anclote Keys).
†† Rio de Flores.
§§ Rio de Pescadores.
¶¶ Rio de Alvarado.
††† Rio Guacacalco.
§§§ Cape de Gracias a Dios.

	Leagues
From thence to Desaguadero * . . .	70
From thence to Zorobaro † . . .	40
From thence to Nombre de Dios . .	50
From thence to Farallones in Darien . .	70
From thence to the Gulf of Uraba . .	14
From thence to Cartagena . . .	70
From thence to Santa Marta . . .	50
From thence to cape de Vela . . .	50
From thence to Caquibaca ‡ . . .	40
From thence to Gulf Triste § . . .	50
From thence to cape Coriano ‖ . . .	100
From thence to Cubagua	4
From thence to Point Solis . . .	70
From thence to cape Anagada . . .	70
From thence to Rio Dulce . . .	50
From thence to Orellana	100
From thence to Marañon	100
From thence to Tierra de Humes ¶ . .	100
From thence to Angela St. Lucar ** . .	100
From thence to cape Primero †† . .	100
From thence to cape St. Augustine . .	70

Cape St. Augustine is the nighest land betwixt Africa and America, and but five hundred leagues from Cape Verde.

From thence to Todos Santos . . .	100
From thence to Abrolhos Ojos . . .	100
From thence to cape Frio . . .	100
From thence to the bay St. Michael . .	600
From thence to Rio Sto. Francisco . .	700
From thence to Rio Tibiquerio ‡‡ . .	700

* Rio de Nicaragua.
† Qy. Escudo de Veragua.
‡ Cape Conquibacoa.
§ Golfo Triste.
‖ Caribana.
¶ Tierra do Fumos.
** Tierra de San Lucar.
†† Punta Primeira.
‡‡ Qy. R. Tibiquari, a tributary of the R. Uruguay.

	Leagues
From thence to the river of Plate . .	50
From thence to Santa Helena . . .	55
From thence to Arenas Goadas * . .	30
From thence to the Baxas Anegadas .	40

Coasting America from Port to Port, as I have done, it amounts to nine thousand three hundred and odd Leagues, whereof there is of them in the South Sea 3375; and the others in ours, or the North Seas, as they call them.

From thence to Tierra Baxa . . .	50
From thence to Baxa Sinfonda † . .	75
From thence to Arecifes de Lobos . .	40
From thence to cape Sto. Domingo . .	45
From thence to cape Blanco . . .	20
From thence to Rio de Juan Serrano .	70
From thence to the cape of Eleven Thousand Virgins	80

From thence you pass the Straits of Magellan, which is a hundred and fifty Leagues long.

Now you enter the South Sea.

From cape Deseada to cape Primero . .	70
From thence to the river Salinas . .	155
From thence to cape Hermoso . . .	100
From thence to Rio Sto. Francisco . .	70
From thence to Rio Santo . . .	120
From thence to Puerto Deseada in Chile .	—
From thence to Rio Despoblado ‡ . .	200
From thence to Arica	90

* Pta. de las Arenas Gordas.
† Or Gulf of San Matias.
‡ El Postrero, vel Despoblado.

	Leagues
From thence to Lima	140
From thence to cape Aguila * . . .	100
From thence to cape Blanco . . .	40
From thence to cape Helena † . . .	70
From thence to Quezemes ‡ . . .	70
From thence to Rio Peru § . . .	100
From thence to Gulf St. Michael . .	70
From thence to Gulf Urana ‖ . . .	120
From thence to Panama	55
From thence to Troantepeque ¶ . .	650
From thence ** to Guerra †† . . .	70
From thence to Burica	100
From thence to cape Blanco . . .	100
From thence to port of Possession . .	100
From thence to Fouseca ‡‡ . . .	15
From thence to Choratego §§ . . .	20
From thence to Rio Grande . . .	30
From thence to Guartinola ‖‖ . . .	45
From thence to Chitula ¶¶ . . .	50
From thence to Puerto Serrado . . .	100
From thence to Teacampetes *** . .	40
From thence to Colima	100
From thence to cape Corrientes . .	100
From thence to Cheneton ††† . . .	70
From thence to Rio Miraflores . . .	250
From thence to cape California ‡‡‡ . .	230
From thence to the bay of Abad §§§ . .	100
From thence to cape Eugano . . .	100

* Pta. del Aguja.
† Pta. de Sta. Elena.
‡ Las Quiximies.
§ Puerto del Peru.
‖ Island of Urana.
¶ Tehuantepec.
** *I.e.* from Panama.
†† Pta. Hyguera.
‡‡ Baya de Amapala ó de Fonseca.
§§ Puerto de los Remedios.
‖‖ Guatemala.
¶¶ Rio Sitala (Acapulco).
*** Unidentified.
††† Chuliacan.
‡‡‡ Cape San Lucas.
§§§ Bahia de Ballenas.

	Leagues
From thence to cape de Cruz . . .	50
From thence to port Sardinas * . .	100
From thence to Syerra Neada † . .	150

There is the furthest discovery.

It is to be considered, that the South Sea ebbs and flows very high, and the North Sea does not, unless it be in Paria, the Straits of Magellan, or a few other places. And thus much concerning America.

* Puerto de Sardines. † Sierra Nevada.

The Length and Breadth of Europe, Asia, and Africa, the other three known Parts of the World.

EUROPE takes its western beginning from the furthest part of Ireland, running to the river Tanais towards the east, and is accounted two thousand one hundred sixty six miles, both places lying in fifty two degrees of latitude. And from north to south, that is from the Morea, lying in thirty five degrees, going northward to seventy two degrees of latitude, is reckoned two thousand two hundred and twenty miles, and had in it of late years, till some of them were united into one, twenty eight Christian kingdoms.

Asia, from the east to the west, that is to say from the river Tanais, directly eastward, four thousand two hundred and eighty four miles; and from north to south four thousand five hundred and sixty miles.

Africa, from east to west, *viz.* from Gambra to Guardafui, in ten degrees northward of the line, is four thousand one hundred and fifty five miles; and from north to south two thousand seven hundred and sixty miles, *viz.* to the equinoctial line, ten degrees, six hundred miles;* from thence to the Cape of Good Hope, two thousand one hundred and sixty miles.†

* 'Miles' in the MSS., but 'leagues' in the Churchill text. Evidently the Churchill editor was accustomed to use leagues and miles interchangeably.

† The figures, according to modern calculations, are:—Europe, lying between 36° and 71° of north latitude, and

from 10° W. to 68° of E. longitude is, from Cape St. Vincent to the Urals, 3370 miles, and from Nordkyn, in Lapland, to Cape Matapan, 2400 miles. Asia, from Cape Tchelyuskin, in 77° 34′ N., to Cape Burros, the southernmost point of the Malayan peninsula, is 5350 miles; and from Cape Baba, in Asia Minor, in 26° 4′ 30″ E., to East Cape, in 190° W., 5990 miles. Africa extends from Cape Blanco, in 37° 20′ 40″ N., to Cape Agulhas, in 34° 49′ 46″ S., being 5000 miles; and from Cape Verde, in 17° 34′ W. to Cape Jerdaffun in 51° 21′ E., being 4560 miles.

The Two Worlds undiscovered, besides the Four known.

THE four known parts and divisions of the world have been often spoke of in these discourses; and, besides these four, there are two others, generally conceived not as yet discovered.

The one under the pole, and not fit to be attempted if we did certainly know a land to be there. But my hope is, as in my discourse of the north-west passage will appear, that under the north pole we shall find a sea, and no land, through which we shall pass to China and those parts of the world.

If not, though that part of the earth should afford us another world as big and spacious as all the rest besides, yet could we expect no more profit thereby than Greenland affords us, that hath never a man in it to bid us welcome, nor commodity on shore to entice us thither to repair. Therefore, though another world should appear in that climate, it can neither benefit us nor the Christian commonwealth, more than a country seated and founded out of ice and snow.

The second imagined new world is to the southward of the Straits of Magellan, commonly called Tierra del Fuego, which is supposed to be a continent, and to run east and west the compass of the world about.

That there is a land, beside the probabilities there are proofs; the one by Mr. Richard Hawkyns, in his voyage into the South Sea, for falling

short of the Straits of Magellan he espied a country. But his intention being of another sort than discovery he would not approach the shore but stood his direct course to the Straits, which he passed in 1594.

The next proof of a land, though not of a main land supposed by Sir Francis Drake to be to the southward of the Straits, was found out by Cornelius William Van Schouten, of whom I have spoken in my Second Book, that, in the year 1616, discovered a passage into the South Sea three degrees to the southward of the Straits, where he found diversity of lands and islands till he arrived at the Moluccas. He found no semblance of a main continent but only islands, and those unfruitful and the people wild and uncivil.

But be it firm land or islands, it is all one to us that seek by the knowledge of it to make gain by it. It is a vain thing for us to think that a country seated in so cold a climate, and not inhabited, should bring forth the fruits of the earth, or that it can be planted to afford us any commodity, no, not the value of fetching though it should cost us nothing.

For compare it with Newfoundland and the continent of that coast, long since discovered and known to us, and consider what use or profit we have made, or can make of a plantation there, and we shall find it not worth our labour. For though it be not so cold as farther to the northward, yet it is in that extremity of coldness that in many hundred years it cannot be tempered for our bodies to live in.

This may seem an ambiguous speech, that the earth of an intolerable cold constitution may be tempered for men to live in and to make use and benefit of.

But what I shall say in this point is proved both by reason and experience,—that the coldness of America in fifty one degrees, which doth parallel us in England, is by many degrees colder than with us in England, and the difference thereof caused by art and pains. For where there is a plantation of towns and houses, commerce of people, whose breath sends forth a heat, divisions of lands, as by walls, ditches, hedges, the grounds trenched and dried with continual fires, it yields a perpetual heat, and is a shelter against all kind of cold in comparison of a country that has none of these benefits or helps.

We ourselves have examples of it, betwixt a natural moorish and wet dwelling and such a place that by industry and art is brought to a better perfection. We also see the difference of houses that are continually dwelt in and fires kept burning, and others that lie uninhabited, waste, and no care taken of them.

Besides these reasons to discourage us from planting in these degrees of America equal to England, the French have convinced us by their example, who, by their long travail and charge, have sought to produce some benefit out of those countries. But all their labours have proved vain; for, they find, the cold destroys all their good intentions, and the only gain they now make is in their trades for furs. Then, if by reason and proof, America in fifty one degrees can yield us no profit, being but two thousand miles from England, where we have a convenience to transport our men and provision once a year, at an easy rate, in ships that fish in Newfoundland by whom they may be relieved; what can we expect from a country, in the same latitude

southward of the line, that is as cold, the people barbarous and savage, and having no convenience to transport our men otherwise than in ships we purposely hire; to sail nigh seven thousand miles from England, the equinoctial line to be twice passed in going and coming, which must distemper men's bodies by the sudden entering out of the cold into the heat? And this is the chief cause to which the death of our men is to be imputed in our long navigations.

More than for our own satisfaction, that a land is there placed, we can expect no good from thence. For where there wants heat there wants wealth, by proof of the pure metals, and the quantity and diversity of them growing betwixt the two tropics above all other parts of the world. And for our other kind of commodities, that are produced out of the earth, the temperate zone affords them in most abundance, but not caused by the heat of the sun alone but by the managing and manuring of the land, by the labour and industry of the people, and by the commerce, trade, and civility, betwixt man and man, country and country. For, no doubt, in times past, when the people of England were barbarous, they lived in the same estate, and the country was of the same condition that other places are, of the same height, at this instant.

Therefore, I conclude, that though all the countries contained in the hot and temperate zones yield no profit nor commodity, unless they be manured and used accordingly, yet, I say, no part of the world out of those zones, where the cold has so predominate a power over men, beasts, and fruits of the earth, is of any value or goodness to entice men to inhabit or people it. For neither by art nor industry such a climate

can be made capable for man to live in, or fruitful to make any use of.

* But notwithstanding these reasons, collected out of experience, there are some men, who to appear singular, and others for argument sake, go about to prove there are other countries not yet discovered as pleasant and as plentiful as those that are known by daily traffic.

It has been my chance often to meet with some of these self-conceited witty men, and, for want of learning to defend my opinion I have fled to the protection of reason, with humility to submit to judgement and to acknowledge errors after I am confuted by proof. But before the discovery of any such countries should be set on foot I have advised that the first thing they should attempt should be to find out another sun. For the power and operation of this sun is known to us by the light it sends abroad to all parts of the world at several seasons of the year, as the countries are seated from the equinoctial line, which is termed 'The girdle of the world.'

This sun is known to rise in the east, and set in the west, making its course every twenty four hours about the world; its declination, to the northward and southward, is well known to us not to exceed the two tropics, which are in twenty three degrees and a half from the equinoctial. We likewise know that it is the guide of the lengthening and shortening of the days, occasioned by its motion. We also know all such lands in America, Africa, and Asia, as lie between the two tropics; and, trading into these countries, know what the heat of the sun in that space produces.

* There is no MS. authority for the remaining portion of this section.

Then seeing we are perfectly acquainted with the virtue and quality of our sun, and the power and heat it sends forth to the countries adjoining to it, and that the riches of all places grow by the heat they are seated in, I desire to be satisfied what richer countries can be hoped for besides those already known to us, unless there be another sun to work the operation this sun does. And thus much concerning my private opinion of the two worlds undiscovered.

Other Seas, besides the Ocean, great Part of them lately Discovered.

I HAVE sailed into all the quarters and corners of the earth through the wide unknown ocean, and left no country unspoken of to which the main sea has given passage. But besides the great spacious and known seas, besides the commerce, trade, and intercourse of all nations I have at large related, there are other seas, which, in comparison of the ocean, may be termed rather Lakes or Straits, which I will a little handle.

The first shall be the Caspian Sea, which is environed and compassed about with land, and seated in a main continent, where there is no issue or passage into any other sea, but like a pool or pond it has a settled standing.

The second is the Red Sea; which, after one thousand two hundred miles running, doth vomit herself into the Indian Sea. And but that this sea is named a sea in the Scripture, which is the authentickest proof of all others, it should no more deserve the name of a sea than the Persian Gulf, which falls into the said Indian Sea, and is equal in breadth and length to the Red Sea and yet is called but a Gulf.

The third is the Mediterranean Sea, which divides Europe from Africa; and something I will say of this sea when it comes to the place to be treated of. But first concerning the Caspian and Red Seas.

The Caspian Sea is two hundred leagues in length, and one hundred and fifty in breadth; many rivers running into it, and especially the river Volga out of Russia, which river divides itself into seventy branches before it falls into the Caspian Sea.* There are few ships and but small trade on this sea, for want of mariners and seaport towns, and because of the poverty of the people and abundance of ice.

Our English merchants, finding a trade into Persia, out of Russia, by the Caspian Sea, built a ship after the manner of England; the tar used about her issued out of the earth thereabouts which will serve for ships. She was of twenty seven or thirty tons burthen, and sailed with English mariners. This was the first and the best built ship that ever sailed, or displayed Christian flag, in those seas; she drew not above five feet water, for the sea is both shallow and subject to shoals.† This trade was left off by reason of the danger of thieves and robbers, and the barbarity of the people.

About this sea Othman, the first of that name and house that bore rule amongst the Turks, had his original, and came from thence in the year 1300.

In some places of this sea the water is fresh, and in some other places as salt as in the ocean. It neither ebbs nor flows, except sometimes with the rage of the wind. There are many sorts of fish which are not in our seas; but great and

* The Caspian is 680 miles long and from 130 to 270 in breadth. The text of the 1704 edition assigns seventeen mouths to the Volga, but the MSS. say seventy, which happens to be right.

† Some time before 1568, built by the Muscovy Co. See *ante*, p. 54.

monstrous fishes there are none. And thus much for the Caspian Sea.

The Red Sea is not red, as many conceive, but takes the name from the red bushes that grow along the shore side. Others are of opinion that the name is derived from the red sands in that sea, especially towards the shore, which cause the water to look red. This sea has three channels; that in the middle is the deepest, and betwixt twenty five and fifty fathoms; the other two are full of rocks and shoals, which makes the navigation only in the day time, and that with danger. The shore affords neither grass, herbs, nor weeds, nor the sea any quantity of fish. Some are of opinion that the gold of Ophir was brought out of the East Indies through this sea.

No man can sail in this sea but Turks, or such as have licence from them, for which they pay very dear.

Prester John has only one harbour in the Red Sea, called Arkiko.* The Portuguese and Prester John have often attempted to dammify the Turks in the Red Sea, but they proceeded so faintly that they still failed in their enterprises.

Mecca is the place so famous for the sepulchre of Mahommed, and for the number of people yearly resorting to it, seated upon the Red Sea and forty days journey from Cairo in Egypt. Jiddah is a great port in this sea whither forty or fifty ships yearly resort, laden with spices and other rich commodities out of Cambay and other parts of the East Indies. And now to the Mediterranean Sea.

Out of the Mediterranean two other seas are increased; the Adriatic, which runs up to the

* Massowah.

city of Venice, and divides Italy from Greece; and the Euxine, that parts Europe from Asia, possessed only by the great Turk.

The Euxine Sea, and no other part of the Turks' dominions, except the island of Cyprus, affords him any harbour to build galleys in, or ships, or materials to build them withal. What ships, galleys, or other vessels soever he at any time sends into the Red Sea, are carried from thence to Alexandria and transported to Cairo, and so to Suez, which is above two hundred miles by land. A trouble, travail, and charge not to be estimated, if we consider his fleet of eighty great ships, twenty five foists, four galleasses, twenty galleys, and seven other vessels, all brought out of the Euxine Sea to Suez, in the manner aforesaid, when he attempted and failed in his enterprise to Aden in 1537.

The commerce and trade into the Mediterranean Sea has been more ancient and famous than all other seas in the world, although it is neither long nor broad; for at the entrance into it, it is not above two leagues over, which was forced by means and labours of people, as it is received by tradition. And I rather believe it because to this day the entrance into this sea is called The Pillars of Hercules, who is said to be the author of the work. And were it not for this small entrance, considering that the sea has a stoppage upon the land of Syria, it were rather to be termed a lake than a sea.

Among many observations I have gathered out of collections on the Mediterranean, this is not the least to be considered, that though the rage and force of the ocean continually runs through this small strait of two leagues, carrying such abundance of water by the help of a current

and the force of a westerly wind that in reason it were enough to overflow and drown that part of the earth on which it beats, having no passage out, yet in no part of the land where these waters pass do they exceed their ordinary and usual bounds and limits. There have been many opinions and disputes about the reason hereof; but for my part I hold with him who judges that sea has a passage into the earth.

My next observation is that God has placed in that sea the most, and the most plentiful islands of the earth. Which islands have heretofore sent forth men of fame to enrich the world with wit and learning, and in this time spread their commodities into all the countries of Europe and receive theirs in exchange. And though I may attribute to every island some particular honour, but that it is not proper to my discourse that treats only of the sea, yet will I say for the excellence of the island of Cyprus, which the Turks have enjoyed ever since the year 1571, that it affords, without the help of any other country, materials to build and furnish a ship, as namely, masts, ropes, sails, and such like, that she need not be beholding to her neighbours.

My third observation is that in that sea there have been fought more naval battles by the Romans, Turks, and Christians than in all the other seas of the world besides. The wars of the pirates was in that sea, whom Pompey the Great overcame, to his everlasting honour and praise. The Romans kept in continual employment in that sea two thousand sail of ships, fifteen hundred galleys, eighty great galleons, with their prows and poops richly gilt, and had always double provision for the navy.

My fourth observation is God's blessing to

the Christians and Christian shores, opposite to Barbary, possessed by Turks and Moors. For that in all that coast of theirs God hath not given them one harbour to entertain a fleet, which has made them heretofore ignorant in navigation and sea-affairs. Whereas, if the shore had afforded them ports, and their land timber and all other materials to build shipping, considering their numbers, valour, and the divisions of Christians, I am of opinion, before now, they had been masters of the better part of Europe. And I may the rather conjecture it by the hurts and spoils the pirates of Algiers and Tunis have of late years committed upon the Christians since they have had the use of Christian ships ; for themselves have none of their own.

And only these two places afford safety for their vessels ; Algiers by a mole or cove, made by art and the pains of men out of the sea, and Tunis by an open road, called the Goletta. And this shall suffice for the Mediterranean.

Besides these seas aforesaid there are many lakes ; some known, others imagined, or received by tradition, as namely, that of Africa, called Zembre, out of which flow the rivers Nilus, Niger, Como, Quama, Maginca, and divers others.

The river Nilus flows forty days in a year, and decreases as many, (that is to say) from the 27th of July to the 6th of October. The river Niger doth the like, and much about that time.

The rivers Cambra and Seneca,* which divide the colour and complexion of the people, fall out of Niger. On one side of the river Cambra the people are of a dead ash-colour, lean, and of small stature ; on the other, black negroes, tall and well proportioned.

* Gambia and Senegal.

In the lake of Zembre, as also in the river of Layar, there are water-horses, and water-oxen, which breed in the water and at night come ashore and feed upon grass. The horses are sometimes taken and made tame; they run swift, but a man must be careful how he rides over a deep river on one of them for they will suddenly dive under water.

Sinus Persicus is in the Gulf of Persia; and has in the mouth of it, in the Indian sea, the island of Ormuz, famous for the great trade to it from the Indies and all the countries in that part of the world.

There are divers towns of the Arabs on the Gulf of Persia, and great traffic by water, notwithstanding that it is shallow, great customs are paid, and is subject to Arabian thieves. The town they first embark at in passing down to Ormuz, is Bierr *; the vessels that sail in that sea are of forty or fifty tons in burthen, and have no iron in them but only in their anchors.

Babylon stands upon the river Tigris, which falls into the river of Euphrates; it is a great through-fare, and stands in Persia. From Babylon they go to Bassora, which is a town of great traffic; in former time it was under the Arabs, but now under the Turks. From Bassora they go to Ormuz, which is six hundred miles distant, and all in the Persian Gulf.

Besides the sea and lands lately discovered, of which I have formerly treated, producing nothing but my own reasons to strengthen my opinion, there are other seas and unknown passages supposed to make a passage or communication from one to another. As namely, the north-west and north-east passages to bring us to

* Qy. Bushire (Abu-Shehr).

other seas, which our nation, above others, has been industrious to search out, to its yearly expense, hazard, and charge, without effecting any thing as yet. These that follow are reasons, or rather arguments, *pro & contra*, to prove or disprove a passage, which I refer, as I do all the rest of my discourses, to the consideration of men of more judgement than myself. It was written upon the return of Hudson's ship, after he was treacherously murdered by his company.*

* Therefore about 1612.

A Discourse concerning the North-west Passage.*

THERE are three things to be considered in this pretended voyage, upon the discovery of the north-west passage this present year 1610.

1. The first is the probability of a passage.
2. Whether it is like to tend to the southward or northward.
3. What commodities are like to arise to us alone, above any other nation, by it.

That there is a passage is confidently believed ; though there be several opinions whether it runs into the South Sea, or into the North-west, after the entrance into the straits, which experience must determine. That it hath been passed there are testimonies by report of some themselves that seem to have passed it, but grounded upon such weak reasons that they are rather to be confuted than held authentic.

Gemma Frisius says that there went three brethren from Europe through this passage, whence it took the name of Fretum Trium Fratrum.

In my opinion if Gemma Frisius intended we should believe his report he should have set down the names of the three brethren, their country, the shipping, out of what port, or by whom they were

* This section is based upon Sir Humphrey Gilbert's ' Discourse of North-west Passage ' (Hakluyt, vii. 158 *et seq.* ed. 1903), but Gilbert's summing up of the possibility and advantages is more favourable than Monson's.

employed ; the season of the year they set forth, the time of their return ; the course they sailed ; what sea they opened when they were through the straits ; what hope or despair in making benefit of their discovery ; the conditions of the people they met with ; the commodities of every country where they had commerce ; the altitude of every place ; what dangers are to be shunned, or some particular accident that fell out in the voyage—for these are designs of men's voyages and discoveries. And not mentioning any of them, why may we not conceive it to be a fiction, as well as divers other names that are given to places in maps within the lands of Africa, Asia, and America, which never any man was known to be at to give an account of.

We must either conclude that passage not worth following, which was discovered and left off after the first voyage, or that those princes, or others, to whom they made relation of it gave little credit to their report.

For, no doubt, if there had been any such thing it was undertaken for the same end we now attempt it, that is for the discovery of new lands where we may have commerce and traffic. They could not be ignorant of the nature of commodities, and it is like they would have brought home an example of some that would have given encouragement to have persevered and not desisted from the enterprise, it being discovered. Neither is it likely that three brethren, who presumed to undertake such a voyage for their honour or glory, would let die so noble and so memorable an action as the north-west passage.

The second reason to prove a passage is alleged by Cornelius Nepos that there were certain Indians cast upon the coast of Germany,

which were presented by the King of Snith * to Quintus Marcellus Celer, the proconsul of Gaul.

The third, that in the year 1160, whilst Frederic Barbarossa reigned Emperor, there came certain Indians cast upon the coast of Germany.

The fourth, that Otho, in the story of the Goths, affirms that in the time of the German Emperors, there were certain Indians cast upon the coast of Germany.

These four proofs are verified by three authors. But considering that we read in the days of Quintus Marcellus the Romans were so desirous to enlarge their empire that they left no means unattempted, nor no country heard of unconquered; and yet that they would not examine these men, of the custom of the country, the distance from whence they came, the wealth and power of their King, the way of their coming, and, at least, to devise how to send an ambassador to be informed of the state of their nation and to settle an intercourse of traffic—I must confess if these things were not put in practice by the Romans they were less careful of their government and greatness than any history can lay to their charge.

These reasons, with one more, I must likewise allege to the two Christian Emperors, that they should be so careless in their duty towards God, that, having knowledge of heathen people, they would not use their best means and endeavours to draw and entice them to the yoke of Christ. By which means they might have been civilized, and, having learned the language and true worship of God, this would have proved a good introduction to have wrought their own ends and desires upon them.

* Swabia.

These reasons, I say, may breed some scruple in me to doubt that they were people of the East Indies as is supposed. Though in those days they might give them the names of Indians because the savages and the people of America, nor America itself, was not then discovered, nor of many years after. I will not deny but that such men might arrive upon the coast of Germany. But I should have been better confirmed if the burthen and manner of building their ship had been expressed, with the number of men, their time of absence from home, the behaviour and civility of the people, what sea or strait they passed, what commodities they brought with them and desired to carry from thence; for the author said they came to trade.

But the greatest argument we are grounded upon that they came out of the Indies is because in the discourse they gave them the name of Indians. But I do verily believe, if there were any such people, that they were savages of America, over against Germany, who were put from the shore with a westerly wind; as the Spaniards relate of a Biscainer, that was forced with an easterly wind from the Canaries to the coast of America, from whom Columbus had his light for the discovery of the Indies. Both these reports I believe alike.

The fifth proof of a passage is grounded upon a report of Cortereal, a Portuguese, who, by his own report, passed it and gave it the name of Cortereal. But where this Portuguese was born, or took shipping, or by whom he was employed, or upon what occasion, what became of the rest of the men, the name of the ship, captain, and master, or the journals of the voyages, is not expressed. Which makes me doubt of the credit of this

story, for there is no man so void of sense that does not observe the month and day of his departure from home, and all accidents in the journey. Or though the Portuguese should be careless thereof yet, of ten mariners, eight of them would observe it.*

But, leaving this to the Portuguese forgetfulness, let us examine who should employ him, and upon what occasion. If we speak according to reason, no prince so likely as the Kings of England, Scotland, or Denmark, whose countries lie more convenient for the passage than any others. Neither is it likely that any other than a prince would set them out, because it would concern a prince more than any private man. But allow that more than one or ten should employ them; think you the secret of the voyage could be concealed, or that they would leave prosecuting it when discovered? No, no; for in those days England, Scotland, and Denmark, would have thought it a great happiness to their State to have found it out.

And to prove what I say, that England was ignorant of any such discovery, we have no record of any such voyage undertaken out of England; nor proof of the Portuguese offer to any King of England, as we have of Columbus, who tendered his service to Henry VII for the discovery of the West Indies before he made offer of it to Spain.

How this Portuguese could cause such a silence in the rest of the company as not to make report of it is very doubtful, seeing man naturally is apt to extol himself. And such a service as that passage would cause the men not only to boast of

* Gaspar de Cortereal sailed along the coast of Labrador in 1500.

it, but also to make offer where it was most likely to be accepted; which, as I have said, I could never hear was done to England.

It is an old saying that three men may keep counsel if two be away; but that the Portuguese could pass in a ship that had but two or three men to sail her, or that they could be made so silent as not to report, I refer myself to any judicious man.

The voyage was neither by the King his master's appointment, nor by any minister under him, nor by the consent of the one or the other you may conjecture. Because the discovery of that passage was likely to hazard his wealth and greatness in the East Indies, and therefore, if any such journey should be attempted, it is likely he should rather forbid than further it. And seeing it was never seconded by England, Scotland, or Denmark, and that the King of Portugal had less reason than the rest to discover it, I think the Portuguese was like a great many vagabonds in England, who beg under the name of soldiers that never were in war.

The sixth proof of a passage, and particularly out of the South Sea, is related by one Salvatierra, a gentleman of Spain, that spoke it from the mouth of one Andrew Urdañeta a friar, in the year 1560,* which friar confessed to the said Salvatierra that he had passed from the South Sea into Germany through the north-west passage. This report seems to be a hearsay of a second person; and whether the friar spoke it to Salvatierra, or no, that must rest upon the honesty of Salvatierra; and whether the friar spoke truth in saying it, rests as much upon the honesty of the friar. So

* In 1556–7 is the date given by Fernandez de Navarrete (*Noticias Historicas de las Expediciones hecha . . . en busca del paso del Noroeste*), who also disbelieves the story.

that there are two men's credits at stake, and neither of them both to be examined: but let us examine the likelihood of it.

The King of Spain in those days had as little reason to discover such a passage into the South Sea as the King of Portugal, because it would be as great a damage to him as to the King of Portugal, the trade of Peru being as much exposed as that of the East Indies. But suppose there was no hurt or damage to the King of Spain by that passage, yet the finding of it would be more inconvenient. For it is nearer from Lima to Panama, and from thence to Nombre de Dios by land, and so into Spain which is the ordinary way of trade, than from Lima to Spain by a north-west passage.

And therefore, seeing the discovery of that passage would neither profit nor shorten the Spaniards' voyage, but might in time prejudice, yea, hazard the whole Indies, I see no reason the Spaniards had to attempt this discovery, but rather to divert men from finding it; and therefore the friar's testimony to be doubted.

By his own report this passage was not long discovered before the year 1560. Sir Martin Frobiser's first attempt to the north-west was undertaken in 1576, so that there could not be twenty years difference betwixt their two undertakings. If the friar's relation had been true it is not likely it would have been concealed. And seeing Sir Martin's action was undertaken by the Queen, who had better means to inform herself of the state of it than any private man, no question but the Queen would have procured either some of the men or, at the least, some relation of the voyage for Sir Martin's better instruction.

Or, if the friar's arrival had been upon the coast of Germany, as neither the time, place,

company, nor ship, is spoken of, nor any German writer makes mention of, which it is likely they would have done if it had been true, or if not, so memorable a thing as the north-west passage would not have been forgotten in twenty years. Besides, the Germans had been as likely as any nation in the world to have attempted it if it had been true, considering how industrious and ingenious they are by nature. And, seeing that neither report made it famous nor that it was ever seconded by any other person, I think the friar passed it in a dream, or upon the horse Pegasus.

The seventh reason to prove a passage was by Estavão Gomez's offer to Charles V. in 1527, who would have sent to discover it but that his employment was so great otherwise that he could not attend it. And the King of Portugal, fearing that the Emperor would persevere in the enterprise, gave him three hundred and fifty thousand ducats to desist, as saith Francisco de Ulloa.

How probable this is, let us a little examine. First, I think that neither Gomez, nor any other man, durst make such an offer to the Emperor; for he might as well have presented him with poison in his cup as to discover a passage that might prove so hurtful to the State of Spain. And I think few Kings would have suffered Gomez to have lived, if they believed his relation, lest upon refusal he might have tendered it to some other prince or country that might lie more conveniently for it.

Secondly, Gomez could not have been such a fool but to think, as it stood with the state of the Emperor, that to have the passage found, as the Emperor was King of Spain, was the most hurtful and dangerous thing that could happen to his kingdoms. And of the two titles and dignities

the Emperor was to respect his inheritance of Spain, being successive, as the other was but elective.

The proofs that it has been passed are not set down by Gomez ; and reasons that there may be a passage are as well known to thousands as to Gomez. Which makes me judge of Gomez to be an undertaking fellow, as we have many in our age, that will put themselves into action and promise good success to keep themselves employed. And I do the rather believe this of Gomez because I read in the voyage of Magellan about the world that this Gomez was pilot of one of his ships, wherein Alvaro Mesquita, Magellan's nephew, went captain ; and coming into the Straits of Magellan, Gomez mutinied and compelled this captain to return home.

Besides, I find it recorded of the said Gomez that he undertook the discovery of the north-west passage in 1525, and after ten months spent without effecting it he brought home certain Indians, and, arriving at Coruña, was called to from the shore, as he entered that harbour, to know what he came home laden withal. He answered, with 'Esclavos,' meaning with Indians, which the others conceived to be 'Clavos,' *viz.* cloves, upon the first apprehension thereof ; and in hope to get a reward of the King, the party posted up to the court with tidings that Gomez had been at the islands of Moluccas, and was returned home laden with cloves. But when this news was contradicted the fellow lost his charge and travail, and they were both derided.*

* Gomez sailed, in 1525, along what is now the northern coast of the United States. In Diego Ribeiro's map of 1529 a vast extent of territory is marked as 'Tierra de Estavão Gomez.' I do not know that he ever professed to have discovered the north-west passage.

But to return where I left off, though there had been no likelihood to impeach the Emperor in his Indies by this passage, yet considering it was like to prejudice the King of Portugal in the Moluccas and the East Indies, the Emperor had reason, without receiving any such sum of money, to hinder it. Forasmuch as the more nations traded that way the sooner they might discover those places that were discovered afterwards, as namely, the Philippines, and other islands, and in time might prove his most dangerous neighbours.

But especially the Emperor was married to the daughter of Dom Manoel, King of Portugal, who had the reversion of all his kingdoms if his heirs males failed, as they did, and became hereditary to Spain. And therefore it was most ridiculous we should conceive the Emperor ever threatened the King of Portugal with that discovery, or received money of him to that purpose, as is expressed. But I observe it is the nature of all men to flatter themselves with hope of a thing they would have, and will wrest reasons and stories to strengthen their belief, by example of this which they misreport. And therefore I will set down the truth of this story out of authentic authors.

There was a long question and debate, between the Emperor and the King of Portugal, to whom the Moluccas should belong. And it is true the Emperor laboured to find another way to the Moluccas than by the Cape of Good Hope.

Magellan was a Portuguese by birth who had lived seven years in the Indies. He left the service of his King, and offered it to the Emperor, giving hope to find a new way to the Moluccas, which with great difficulty he performed though it proved the loss of his own life.

The controversy to whom the Moluccas should belong continued between the two Crowns of Spain and Portugal, and the Spaniards made sundry attempts, by way of the Straits, but evermore with a most unprosperous success. At last Dom João III. of Portugal, and brother-in-law to the Emperor, willingly lent him three hundred and fifty thousand ducats when he went into Italy to be crowned Emperor, but this money was not signed where to be paid again, by the negligence of him that had the dealing in it, by which means it was never repaid again. It is true the condition was that Portugal should enjoy that trade for a time, but there was never mention made of desisting from the north-west passage, for it was not so much as spoken or dreamed of, whatsoever any man writes to the contrary.

Although there are a great many more probabilities that the straits have not been at any time passed, than otherwise, yet it is no reason absolutely to disprove a passage. But until it be undertaken and followed to purpose, I mean with discretion, charge, and labour, we shall still believe ourselves, having nothing but opinion to build on ; for whatsoever any man grounds upon philosophical arguments, or by any globe or card that is extant, it is but a weak foundation to rely upon. For except a globe-maker can as well prove by experience that there is such a sea as he sets down, and by the testimony of some men that went it, he may as well suppose what he makes sea to be as dry land as the deserts of Arabia. And therefore leaving this to trial I will proceed further.

I have perused all the voyages to the north-west made by Sir Martin Frobiser and Mr. John Davis, with whom I have likewise conferred

touching their opinions, and I have found by them a likelihood of it, but no more assurance of it than from those that never went so far as they did. Therefore whatsoever is hitherto done is but imaginary.

I must confess that the last attempt in 1610, of Hudson's, has given us knowledge of four hundred leagues further than ever was known before ; and out of his discovery we are to conjecture more or less possibility of it.

And because I make this voyage the foundation of all others that shall succeed I will set down, as much as I can remember, what I received from the mouth of the master * that came home from Hudson, touching the particulars of his voyage, and whether it will avail us, or no, being discovered.

The entrance was in sixty three degrees, and they ran in that height two hundred leagues, and finding the strait, which was forty leagues over, to trend south, they followed that southerly course, making account it would bring them into the South Sea. And here they ran two hundred leagues more till they found the water too shallow and impassable. They wintered in an island in fifty two degrees, where, in the whole winter, they saw but one man who came to them but twice. The second time of his coming he brought with him three deer skins, which he would not exchange for a hatchet, for he prized them at more value. But when he saw that he could not have it under the whole three he was content to let them go, and promised by signs to come the next morning, but came not.

The savage was clothed in skins and his

* Robert Bylot. The authoritative account of Hudson and his voyages is that by Dr. Asher, *Henry Hudson the Navigator*, London, 1860 (Hakluyt Society).

arrows forked with iron. They found the place much subject to north-west winds, and far exceeding any part of England in coldness.

As they trended south, going about the headland, they passed near the shore, and betwixt certain rocks, small islands, and the main land. They found the flood to come from the north-west, which is one of their arguments that it came from the main sea. The next voyage must be to discover from whence this north-west flood comes, and to see if in running west or north-west, they can find a strait to run south, or an open sea to the northward.

Victuals they found none from the shore but white partridges. The water they had was snow water, which fell abundantly into their ships every night: wine, aquavitæ, and other liquid things, did freeze in an exceeding manner though it was but in fifty two degrees.

I conceive two especial benefits by Hudson's discovery. The one, that we have passed two hundred leagues more west than was ever discovered, so that hereafter we may be bold to sail two hundred leagues directly, without losing any time to search one shore or other, which would have taken up a whole summer if they had not intended to winter.

The second, is that whereas there was hope of a passage to fall into the South Sea not many leagues after the entrance into the strait, this discovery has put us out of doubt of such hope; so that I make account there is another summer gained.

I will suppose we are two hundred leagues in the strait, and, as they say, we encounter with a north-west flood. But before we direct our course west, or north-west, let us judge of this flood and

where they met it : if in the midst of the channel we may the better believe it came out of the main sea ; but if amongst islands, broken land, or rocks, we have no reason to ground our hopes of a voyage upon it. For by experience upon the coast of Brittany, or where there are many islands or rocks, the tides alter according to the rocks and islands. And I know Hudson's company confess they met them amongst rocks and islands ; and therefore no hold to be taken of that north-west flood.

But suppose, according to the hope we conceive of this flood, we direct our north-west course, being entered the strait, and in sixty two degrees. You must note that in running north-west every twenty eight leagues you raise a degree ; and the further you run any point to the northward the greater hazard you shall endure by ice and cold, the worse wintering, if you be put to it, and the further from your voyage because the course lies southerly.

But one hope may be that the northern part of America, which is made land in the maps, will prove sea. Allowing it to be true, and the strait to run but two hundred leagues farther, either northward or westward, then let us compute the time we have to pass the strait, and reckon our departure from England, and we shall find the climate very unseasonable, either to winter or to make a factory, if we pass it not in one summer.

From England to the mouth of the strait seven hundred leagues ; to the place discovered two hundred ; to the sea imagined two hundred north-west, where I will suppose there is an open sea though the contrary is known. Now have I run one thousand one hundred leagues, and in sixty two degrees.

And if we will know the distance from thence to the Moluccas, or Java, where we have now a trade, this rule will lead us, *viz.* to measure with the meridan line from the entrance of the strait, lying in sixty two degrees, due south to the height of twenty three and a half, which is the latitude of cape California.* Then measure the distance from this meridian to the cape of California, and from thence to the cape Mendocino, which is the furthermost known part of America, and after to the Moluccas, and you shall find nothing gained by this discovery; for that of necessity the land of America must be doubled before we direct our course to any of the places aforesaid.†

But suppose, upon the opening of the sea to the northward, the land proves, as is described in most globes and maps, *viz.* all land and no sea to the southward or larboard side until you wind about the land of Anian, then are you to run due west in sixty two degrees, as aforesaid; or, as the land shall lie, so many leagues as you shall measure by the former rule, *viz.* from the said meridian line to the cape Mendocino, which, considering the distance and distemperature of the climate, the course alone would not be run in a whole summer. Or if, being in sixty two degrees, we find a passage to run south-west, and to fall into the South Sea, about the height of

* Now cape San Lucas; 22° 52′ N.

† The argument is very obscure but the general effect is that it would be as far to the Moluccas by the north-west passage as through the Straits of Magellan, and farther by either route than by the Cape of Good Hope (cf. *infra*). The identification of cape California with cape San Lucas is from Dr. John Dee's map of 1580. Strictly, perhaps, cape Palmo should be given, but the two capes are within a few miles of each other and practically in the same latitude, and cape San Lucas is the outer one facing westwards.

twenty-three degrees, it is great odds that strait will not always run deep, by example of the Red Sea and Persian Gulf, both which want no breadth, though very shallow. And if this should prove deep and broad, yea, though the narrowest place be but one league over, we may have the honour to discover it but any other nation shall reap as great benefit by it as ourselves if we cannot make it good and fortify it on both sides.

Let us reckon how many leagues we shall run before we come to the Moluccas by the course into the South Sea. Allow we be in sixty two degrees, and nine hundred leagues from England; and that our entrance into the South Sea be in twenty three degrees south-west; then have we raised thirty nine degrees, which in a south-west course amounts to nine hundred and seventy five leagues. And from that height to Java the distance is certainly known, by the navigation of Mr. Cavendish, the pilot of whose ship, and many other principal men, are yet living, and have annexed the distance of places, the days of sailing, the winds, and their abode in every harbour where they arrived to the *Discourse of the Voyage about the World*; as thus:—

From cape California, in twenty three degrees and a half, to the islands of Ladrones, they note one thousand five hundred and fifty leagues; from the Ladrones to the Philippines three hundred and twenty; from the Philippines to Java Major five hundred and twenty five. So that by this computation, which cannot be disproved, it amounts to four thousand five hundred and seventy leagues betwixt England and Java, by a passage into the South Sea. And reckoning from Java to England, the common way, by observation of the said pilot, it is but four thousand five

hundred leagues, *viz.* from Java to the Cape of Good Hope one thousand eight hundred leagues; from thence to Flores one thousand two hundred; from Flores to England four hundred and fifty; so that we find by demonstration, that it is further by four hundred and forty five leagues,* by a passage into the South Sea, than by the known way of the Cape of Good Hope which is daily frequented.

But it may be said, by the north-west passage we shall have the trade of Japan and China, which will more avail us than the trade of the Moluccas and the East Indies because they are many leagues nearer. If the passage be found I confess there is something gained in the distance, but nothing in the navigation. For allow that this passage falls into the South Sea; if it does, little good is like to ensue of it because of the hazard of cold, of ice, and of unknown seas which experience must teach us.

But to disprove the opinion of such as are erroneously carried away with the conceit that the strait is like to fall into the South Sea, about the cape of California, this that follows shall give an infallible satisfaction, by the trials that have been made upon that coast to the westernmost part of all America, both from Quivira and Cybola within the land, and from Acapulco, and the port of Navidad by sea.

Hernando Cortes, who was Captain-General of this new-conquered country of New Spain, and Antonio de Mendoza, at that time Viceroy of it, the one hating the other mortally, as is the custom where two such commanders have such equal

* B. reads '840 leagues.' The arithmetic seems very erratic all through.

authority, yet they both preferred the service of their master before their own spleen and revenge, and jointly undertook a discovery of Quivira, and the westernmost parts of America, being made believe it abounded in riches and had a trade from China and other parts of Asia. They employed in this journey one Francisco Vasquez de Coronado, who arrived there by land with a number of Spaniards, both horse and foot. In which journey they endured greater famine and other extremities than all the rest of the Spaniards' undertakings in the continent of America.

Some of those Spaniards, though not many, returned by land to Mexico, from whence they departed, and reported the calamities and extremities they suffered. By this I collect, and by my collection will frame my unanswerable argument, to give the world satisfaction that from Mexico to the westernmost part of America, in which space, if there be a passage, it must fall into the South Sea, in all their journey they found neither sea, strait, nor other impediment, to hinder or stop their journey by land, but that they went and arrived at Cybola and Quivira, from whence they returned, which they could not have done if there had been a stoppage by water, either fresh or salt. Neither did they carry any provision of boats, or other means to transport men or horses if they had been put to it.

But for better satisfaction to this point I will lay open a later proof, known to divers Englishmen yet living that were themselves actors with Mr. Cavendish in his glorious voyage about the world in 1586. After he had passed the Straits of Magellan, and the coasts of Chile, Peru, New Spain, and other places, he came to the cape of

California the year following, where he took his rich prize, of seven hundred tons in burthen, coming from the Philippine islands, bound for the port of Navidad in New Spain. This ship had in her one hundred and ninety men, passengers and others; and after he had laden his own ships with her costly merchandize he burnt both ship and goods, not being able to carry her with him, and the men he put ashore at cape California, from whence they travelled by land as far as to the port of Navidad, whither they were bound by sea.

In their way they passed many Indian countries, not commonly known to the Spaniards before. In all which travel they found no interruption by strait, river, or any other let by water, fresh or salt. And for the proof of their safe arrival at the port of Navidad aforesaid there are divers relations published by the Spaniards themselves for the rareness of it. But, especially, not many years after, it happened that the pilot of the said prize taken by Mr. Cavendish, and a Greek by nation, returning into his country after twenty years spent abroad, happened into the company of one Mr. Lock, an Englishman, in Italy, with whom he grew acquainted and related to him oftentimes the particular accidents that befell them, as well in their taking as in their travels by land after their being put ashore by Mr. Cavendish aforesaid.

And this shall suffice to prove the impossibility of a passage from our seas to the South Sea through the land of America.

But, leaving this to men's consideration, allow that we be in twenty three degrees, and in the South Sea, and direct our course to the islands of Japan, we are to run one thousand six hundred

leagues a westerly course, *viz.* to cape Mendocino seven hundred leagues, and from thence to Japan nine hundred, by the reckoning of Francisco de Gualle, who was a perfect pilot and had often sailed it ; * so that by this course we shall run three thousand four hundred and seventy five leagues from England to Japan. To prove that nothing is gained by this navigation I will allow we are at Japan, and resolve upon our return for England the same way we went. We must so cast our voyage as to be sure of a sufficient time for our passage through the strait in summer, otherwise we must resolve to be frozen or starved by the way. And what a hazard we shall endure if winds cross us, our masts break, our ships spring a leak, the sails split, men fail by sickness ;— I say, if any of these accidents happen we are left destitute of all help or hope, and the greatest calamity or misery that ever befell men will light upon us, for there is no death comparable to hunger and cold. And to shew how unlikely it is for us to return in one, or scarcely in two summers, let us examine the winds and seasons.

The Spaniards that come from the Philippines to New Spain stand over to the main land of America and coast the shore, finding the winds all easterly at sea, insomuch that they are returning eight months, which they are going in ten weeks. And this is the rather approved by Mr. Cavendish's sailing from cape California to the Philippines, who ever found the wind from betwixt the east and north-east, from the 19th of November to the 15th of January, in which time he sailed two thousand three hundred leagues. So that although we shall arrive with a fair wind at Japan, yet, considering we shall find it against

* See Hakluyt (ed. 1903), ix. 326 *et seq.*

us in our return, we shall sooner by one-third part, and with less hazard and danger, come home by the Cape of Good Hope than through the South Sea.

Let me now appeal to the opinion of any mariner whether it were not better for a man to sail six thousand leagues in a certain and known navigation, where the winds nor seasons never fail, than three thousand in so uncertain a sea as we shall find to the northward, where the winds are variable and the climate unnatural, except it be in the South Sea which I have shewn the inconvenience of.

The delay of voyages is commonly when the factor is not ready to lay his goods aboard. For there may be time lost in seeking such commodities as his merchant writes for, for a convenient time and season to ship it, some want or disability in the ship or company, arrest or stay by the prince where they are, or many other casualties not thought upon. But when a ship departs from any harbour so far off as the East Indies, and seeks to recover the place whither she is bound, it cannot be any great hindrance to the merchant to lose a month's time in coming home, but the rather profitable, as I will demonstrate by one of those voyages.

For if by the north-west there be so quick a passage, and so short a way to go and come as is desired, I say that the trade in few years will be overladed as it is now by the Cape of Good Hope. Since we and the Hollanders have had traffic in the East Indies pepper is bought from 2*d*. to 4*d*. there, and when it increases in price where it should lessen, and falls where it should increase, what think you in time this voyage will come to, if followed, either the one way or the other ?

Let us likewise consider what needless commodities they bring from thence. I see not but this country may live as well without spices as our forefathers have done; neither are they to be had in truck of our home commodities, as cloth, lead, and tin. But if the merchant make gain by this trade the chiefest stock he employs must be in silver, which has, and will in time, make such a dearth of money in England as all men in general will rue it. And as I have said before, we shall have the less money, and the greater quantity of those needless commodities if the navigation should prove short and easy.

If a man will speak truly and indifferently of the trade of the East Indies, it is not so fit for any King or prince as the King of Spain who has another Indies to supply the silver that goes out of his country. Then what hope have we to persevere in that voyage, who have no mines or means by traffic to bring money into this kingdom? For this take for an infallible argument:—that country which receives more commodities than it vends, the overplus must of necessity be of money: and by reason of our wasteful expense in such needless and superfluous things as silks, lawns, spices, wine, tobacco, sugar, and a hundred such vanities, we must confess there comes in much more of these commodities than goes out of the realm in truck for them. Then let us consider the benefit of this trade, and how long it is like to continue good for the benefit and profit of this kingdom.

The mischief that is befallen us, by exhausting our silver, was foreseen long since by Charles V., Emperor, who, beholding the greedy gain of the Portuguese in their trade to the East Indies, was wont to say, 'They were enemies to Christendom

'by carrying their treasure from Europe to enrich 'the heathens.'

But now to proceed to what I conceive of Hudson's last voyage. I find we are hopeless of any good by the south strait, where he wintered, because of the shallowness of the water in fifty two degrees. Or, if it had run as far as to have brought him into an open sea, yet it was a great error in Hudson to bid his company welcome into the South Sea, upon that strait tending to the southward; for, if you please to measure it by a meridian line, you will find it would have brought him scarcely as far as the islands of Lucayas, which is short of the West Indies, and the land Columbus first discovered.

I verily believe the savage Hudson met withal had been acquainted with trade; first, by adventuring so near the ships and men, the sight whereof would have daunted him if he had not seen the like before. Secondly, that whereas at his last coming he brought with him three deer skins which he would not truck for a hatchet, esteeming them of better value; this shews he knew the price of the hatchet, and knew as well how to rate his hides. And thirdly, by the iron of his dart, which manifestly shewed he used to trade with Christians.

But if it be true, which is told me, that some did imagine the iron came from Japan, and that those of Japan traded with these people, that conceit is strange to me, that any man should believe that Japan, lying so far thence as it is, should have trade with a people and country that affords nothing, no, not so much as victuals.

If the Japanese came to discover they saw themselves out of hope to pass further that way, by example of our men. So that it is like that

if they had been there once they would not have come twice, and therefore little sign of a trade. Or, if they came to discover, it is likely they hoped to find a sea, as well as land, and then I see not but they might as well come to us as we desire to go to them.

But whosoever will understand reason need not go so far as Japan for it. For it is most apparent, considering the height, the distance from the ocean sea from hence and from Canada, where the French yearly trade, it is like this fellow had trade with the French. And I am of opinion that Canada is but one hundred and fifty miles from this place. And I further believe that the relation the French give of a sea they have seen west in those countries is no other than this strait, lake, or what else you will call it, that Hudson discovered.

Having shewed the small probability of a passage, and confuted such men's reasons as have pretended to have passed it, having alleged some arguments that we should have gained little time, though it were discovered either north or south, and thirdly, what profit shall we reap by it though it were found? Especially considering we shall have no more privilege than any other nation, except it prove narrow, for us to strengthen and fortify.

Now, lastly, will I set down a project how to undertake a discovery with small charge. And either find it, or be out of hope of it, in little more than two years.

Besides the charge and endeavour that is to be used in this voyage of discovery I would persuade, though it be with some cost to the adventurers, that either a pilot be procured from Spain that hath sailed from the Philippines

to New Spain, who I think is better able to give a light of this voyage than by experience we shall attain to in many years, or, if there be a difficulty to get such a pilot, yet that he may be conferred with by some of good understanding in cosmography. For, no doubt, sailing along the shore as they do in that navigation, he can be able to say whether it be likely that any great river or strait can give hope of a passage that falls into the South Sea. Or, at least, he is able to tell the distance from China to the main land of America, and whether the current sets from the north, or no, as Francisco de Gualle describes; and he is able to tell the breadth of the main land of America, from cape Mendocino to New Spain, if you doubt of Francisco de Gualle's report. And this will I wish to be done, before undertaking another voyage, for certainly it will give great hope or despair to our discovery.

I know it is conceived by the Spaniards in those parts of the world that there is a sea to the northward that divides Asia from America; but if it be true, (as I think no less) the entrance of it must be farther northward than yet we have discovered. And I am of opinion that we must bring the most northern part of all America southerly * before we run west, or as the land shall trend; and then, finding no ice on the sea, we may be bold to say we have entered into an open sea. For it stands against sense or reason that any strait should run deep or narrow, as it must do if we profit by it, whether it run west, north, or south, so many leagues as the breadth of America, if America be truly described; as that we shall

* B. and R. say: 'the north part of Greenland south of us.'

know by the conference with the pilot of the Philippines.

But now to proceed upon the north-west discovery. The men that go that voyage must be such as trade into Iceland, for they are best able to endure the cold and most acquainted with the northern climates. Three vessels are enough to undertake it; the one of two hundred tons, the others of fifty tons apiece. The ship is to carry such provisions for wintering as shall be thought necessary, with a surplus of victuals to be put into the barks at the departure of the ship from them. This ship may, if they see a convenient place, make her voyage upon the coast with fishing; if not, she may put room for Newfoundland and buy her lading of fish, which, being carried into the Straits,* will make a profitable return towards the charge of the discovery. The two barks must be strong and short, because of their yareness to stay and tack if they come into a narrow strait, shoal water, or amongst ice.

The captains must be skilful mariners and good cosmographers, men of good reputation, and of great resolution for their credits to perform such a voyage, and for their carriage not to be daunted at any disaster. Their commission must give them liberty to punish with death if mutinies or disorders arise. But, above all, nothing must be wanting that can be thought of for a two years' voyage in a northern climate.

The masters must take an oath to use their best endeavours to advance the voyage, and to keep secret the journal. The plats and cards, and all other writings that concern their navigation,

* The Mediterranean.

must be taken from them and the company at their coming home and sealed up to present to his Majesty.

There are many other cares to be committed to the captains and masters. As, their mutual agreement; their husbanding of victuals; their drawing the proportion of every cape; the depth and distance from place to place; the observation of winds, tides, and seasons; the variation of the compass, and care in keeping company; and to appoint a place of meeting if they lose one another, hailing each one both morning and evening; what to do in fogs; to take possession of such countries as they come to for the King, and leaving some signs of their being there for whosoever shall come after. Many other things are to be thought on before their going from home, too tedious to set down.

If the two barks shall arrive in a place where a river or strait does open two ways, they are to part company and each of them to proceed upon their discovery as they shall agree upon, with this direction, that, upon either of their returns, they appoint a certain place on shore where to leave their letters wrapped up in a box of lead. And in those letters to make relation of their success from their departure from one another.

There must be great providence to preserve their men in health, and from danger of their enemy; not to believe the allurement of savages but when they stand upon their own guard; and, if they be forced to use violence, to have a special care that the first piece they shoot be sure to kill or hurt; for so shall the savages be more terrified when they find the pieces kill as well as make a noise. There are many other circumstances to be left to the discretion of the

captains to alter and proceed upon as occasion shall be offered.

But, leaving the discovery of the north-west passage to the care, wisdom, and discretion of the undertakers, I will deliver my conceit of a voyage which hitherto no man hath written of, much less attempted, and that is due north, under the pole. One reason that induces me to it is the nearness to China, Japan, and the East Indies, if there be a passage. For, by computation, it cannot be above fifteen hundred leagues from England to Quinsay.

My other reason is grounded upon an error of the philosophers, who conceived it was uninhabitable under the line, which experience has taught us to the contrary. The like opinion they hold of the pole, and we know they have no more reason for the one than for the other. And, seeing the adventure cannot be great or dangerous for the undertakers, I would wish men to be as forward and willing to venture therein as they are now in this to the north-west. For the proof is alike for any thing that is done as yet.

My third motive is grounded upon that which makes the impediment of the north-west passage, which is ice. And that I least fear or doubt of for the reasons following. The abundance of ice which floats in the sea, and hinders the north-west passage, is not the ice engendered of the sea, for the great salt sea cannot freeze, but it is the ice frozen in fresh rivers and sounds, which, at the breaking up of the year, is driven out of the said harbours into the sea; which shews there is more land upon the coast of Labrador than towards the north pole. For ships have sailed one hundred leagues to the northward of the north cape of Norway, and in seventy six degrees,

and have found no ice. Whereas, if there had been land in that course, or to the northward of it, they would have found the ice for the reasons aforesaid.

And whereas cold may be alleged for an impediment upon this discovery, we find by proof, and not without reason, that it is hotter to the northward in summer than nearer the sun, because of the reflection of it that gives a light and a heat for one half of the year. It is to be compared to a continual easy and gentle fire which will cast a greater heat, and of a longer continuance, than a violent flame that is soon quenched.

And because all discoveries before spoken of, and that hereafter are to be attempted, have been, and must be, by the pains, labour, and industry of mariners, I think it not amiss to set down what I was desired by Mr. Wright, the great mathematician,* to write to encourage and further a certain stipend for the maintenance of navigation for seamen's better instruction.

* Edward Wright, author of *Certain Errors in Navigation* (Lond., 1599) and supposed to be the originator of 'Mercator's Projection' in map-making. He wrote an account of the Earl of Cumberland's voyage of 1589 (*ante*, i. p. 230 *et seq.*).

The Convenience of a Lecture of Navigation.*

I HOLD it not amiss to insert so much as I was desired to write concerning the necessity of having a public lecture read, for the instructing of mariners and seafaring men of this kingdom; which is as followeth.

If I should go about to prove how much more fit it is for England to maintain navigation than any other country that lies upon a main continent I should do no more than many worthier persons have hitherto undertaken, or that men in common reason should conceive. For England is an island, and therefore bound to maintain shipping for defence of itself, offence to other nations, and enriching the commonwealth with

* More than half a century previously Richard Hakluyt had written urging the necessity and utility of systematic lectures on the scientific side of navigation on the plan already existing in Spain (*ante*, ii. p. 330 *et seq.*). An endowment of 40*l.* a year to pay the lecturer was considered sufficient and Drake offered to provide half of that amount, but no wealthy Elizabethan noble or merchant could be found inclined to supply money for a purpose not likely to produce an immediate material profit. As the remaining 20*l.* could not be obtained the scheme never took actual shape. Hakluyt's proposal was made in the first work he published, '*Divers Voyages touching the Discovery of America*' . . . (London, 1582), and it must long have preceded any recommendation of Wright's, who could not then have been more than 24 or 25 years of age and was comparatively unknown and uninfluential. Monson's work shows that he had read Hakluyt and Purchas carefully, but he completely ignores the former's agency in the matter.

trade. For neither can any man enter in peaceable or warlike sort, or we ourselves pass forth of the kingdom, without the help of shipping.

And yet are ships alone no more available, without men to conduct them, than weapons without hands to fight. Seeing therefore that ships and seafaring men are inseparable, the one of no use without the other, we must have as great care to bring up men and make them skilful in that art of navigation as to maintain shipping for the good of the commonwealth. But, with pity I speak it, we have not respected the instructing our mariners; and no marvel that we have sustained so great a loss by shipwreck, for more than our seamen get by bare experience they never endeavour themselves to knowledge. And I judge the reason is because they have no means to attain it; otherwise I think they would be as willing to know their errors as it were fit they should be taught.

The help they received in these later times was by men's writings, which I hold not so profitable as what they shall hear delivered by mouth. For the ordinary mariners are oftentimes ignorant of what they shall read, as not understanding either word or sense; and when they shall have it demonstrated to them, and the hard words and meaning made plain, they will both conceive what they hear and be able to put in practice when they understand it. Another discommodity they shall find by writing is that the secrets of the art will be published to the world, and other nations are likely to make as great use and benefit of it as we ourselves. And therefore as we ought to strive to exceed other men in navigation, in respect I have shewed it imports our country so much, so ought we to keep it

secret, according to the example of Spain, which seeks to conceal divers rivers and other places in the Indies from us, which they know by discovery might breed them inconveniences and benefit us.

It is a question whether a man shall attain to better knowledge by experience or learning? And many times you have controversies arise betwixt a scholar and mariner upon that point. The scholar accounts the other no better than a brute beast, that has no learning but bare experience to maintain the art he professes. The mariner accounts the scholar only verbal, and that he is more able to speak than act.

I confess this is great arrogance in both, to stand so obstinately upon themselves when they ought in reason one to assist the other. But, especially, the mariner is to receive comfort from the scholar, for he that has but bare experience receives what he has by tradition, for learning is the original ground of all arts; but he that has experience joined with learning, it makes that man excellent in the art he professeth. What made Abraham Kendall and Mr. John Davis so famous for navigation but their learning, which was confirmed by experience? *

If we had but a mathematical lecture read, which seamen might resort to, they would soon reform their spiteful humours and confess how needful it is that learning should be added to experience. And this lecture, no doubt, in a little time will make men as famous as either Kendall or Davis, to the honour and benefit of the commonwealth.

* Kendall was an Elizabethan master and ship captain who was employed in several voyages. John Davys, or Davis, was, of course, the famous explorer.

Men of learning were able to give great light for the finding out the longitude, and for the discovery of new lands or passages, which experience must bear out when they have their grounds from learned men.

Every man in travel or journeying desires to find the nearest and easiest way, for his rest and gain of time, to come to his journey's end: and so ought the mariner much the more, for the sea is tedious and more difficult than the land. The land is firm and steadfast; the sea wavering and moveable. The land is known and determined by marks, signs, and limits; the sea is vast, and no marks to know it. The land has hills, mountains, and rocks; the sea has storms, tempests, great difficulties and dangers, and therefore the more need of help to avoid the fearful perils, and unlooked-for accidents, man is sure to meet withal in the wide and spacious sea.

I am of opinion that there is no error the mariner finds at sea, either in card, star, instrument, or compass, but upon his information may be reduced by the skilful mathematician and made perfect. If not suddenly, yet time may work it by following such instructions as shall be prescribed by them.

It is strange to see our errors, that we prefer idle and frivolous studies that bring no profit, as namely, there are lectures of logic, music, physic, rhetoric, and philosophy allowed, and the readers of them have a competent maintenance for the same; none of which studies can bring the twentieth part of benefit to the commonwealth that this is like to do if it be well used. But I speak not that I would have this lecture only erected and the rest suppressed; for learning in all kinds must be nourished in all common-

wealths, being the ground from whence government is derived. And, for my own part, I will rather wish a larger contribution for the maintenance of the rest than a diminishing of what they have.

I am partly of opinion of our mathematicians that hold there is no certainty in the art of navigation in our ordinary masters that take charge; for if there were they would not so much vary one from another as usually they do. For proof whereof, let there be four or five masters or pilots in one ship that goes or comes from England to the Terceiras; if they be any time in traverse at sea you shall have some of them thirty leagues before the ship, and others as many leagues behind the ship. Imagine by this what danger every ship is in that goes from England and comes home again, and it is a wonder to me that more ships do not miscarry considering the danger of our coast. It is not art, but fear and care, that preserves them; for if they should presume upon their art to bear in with any land the rocks would devour ten times more ships than they do. But the masters have so provident a care, and so great a mistrust in their own art that, though they observe the sun and stars never so exactly, they will not presume to bear in with the land which they have not made except the coast be clear or the wind large to claw it off again.

But if this art can be made perfect, and the errors corrected and reduced to a certainty by the painful study of the learned, it will prove a happy thing to all seamen, and by consequence to the whole commonwealth.

The only means of help that is to be expected or hoped for reformation of these absurdities, which the mariner by all his wit and skill cannot

correct, must be by a public lecture allowed to be read, and competent means collected and gathered for the same. For if the hearers of a lecture of the liberal sciences receive profit by hearing it read, you must confess they will receive much greater profit from this, being well taught.

For, besides the common good we shall receive by this lecture, it will concern gentlemen to study the art of navigation, who, seeing the pleasure and the necessity of it, will make them forward in actions by sea which will be a great strength and stay to the kingdom. For it is requisite that gentlemen should have an insight into sea affairs, seeing they are commonly employed in his Majesty's ships in time of service.

It is well known to other nations, as to us, that England of late years has undertaken greater enterprises, and achieved greater victories by sea, than ever any of our forefathers have done. And that these famous memoirs of ours may remain to posterity it is fit that gentlemen who live in this age, but especially such as have been actors in journeys themselves, should contribute towards the maintenance of a lecture of navigation, which act of theirs will remain for a monument to those that are the founders of it. So shall they deserve well of succeeding ages, and their noble deeds will ever live fresh in memory of those that shall come after them.

A Comparison betwixt our ancient and known Trades, and those now in being since the late Discovery of New Worlds; with something relating to the Hollanders and Fishing; the Particulars being referred to the Sixth Book.

I WOULD have our hopeful fishing, now intended, compared and paralleled with such actions of ours as of late years have been achieved with everlasting honour and renown to our nation, as shall appear by that which follows, as well in the discovery of unknown countries, as in new plantations and other sought trades not heretofore known nor dreamed of by our forefathers. And yet the ambition of that mongrel and unmannerly nation of Holland seeks to lessen our praises. They cannot really challenge any thing of themselves but that we gave them light of, as shall appear in the Sixth Book following.

I confess that such English as have been the actors, authors, and abettors of our brave enterprises have obliged the whole commonwealth to them; first, by the adventure of their lives, to seek out the secrets of commerce; secondly, by the expense of their estates till they brought it to perfection; and, lastly, by their labour, pains, and endeavour, to advance our navigation to that it was in former times. And yet if all these be examined and compared to our fishing it will come short of the happiness our kingdom will reap by it.

If we enter into the original of our English

traffics, and the continuance of them till the discovery of new countries that gave us a greater scope to search out the bowels of the earth, you would think it strange our nation could flourish in so high a measure as it did in comparison of the present times. For I find that in sailing to the southward we exceeded not the bounds of the Grand Canaries, which voyage in former times was held a greater wonder and stranger than now about the world. Neither was the art of navigation so common, nor so perfectly known, till of late years that by our travails we have attained to it; for I remember myself the ignorance of a prime master who, going to the Canaries, returned home without seeing any of the seven islands, for want of skill to direct him.

And to prove what I have said, that our traffic to the Canaries stretched no further to the south, this following shall clear the doubt, *viz.* that upon all treaties with Spain, since the discovery of the Indies, we were not prohibited by name the trade of the Indies. Only we were tied to our ancient and accustomed traffics with Spain, which we cannot drive further to the southward than the Grand Canaries, nor of right by those articles of peace can require it. Our ancient and usual trades, before the new discoveries, were to all the dominions and islands of the Kings of Spain, of France, of Portugal, the Seventeen Provinces, the several parts of Germany, Denmark, Norway, Sweden, the Baltic Sea and Iceland. These were the limits and bounds of our English commerce, before the latter end of Henry VII. when we came acquainted with America, Africa, and Asia.

It is marvellous if we consider what England is now, to that it was in former ages. What wealth is returned into this kingdom, in respect

of times past; what increase is made of his Majesty's rents and revenues, in comparison of his progenitors; what an increase there is of ships in number and goodness; what dread and fear all other nations apprehend of our greatness by sea; and what rumours are spread abroad in all the quarters of the world to make us famous. It is admirable if we call these things to mind.

And to come to the particulars of augmentation of our trades, of our plantations, and of our discoveries; because every man shall have his due therein I will begin with Newfoundland, lying upon the main continent of America, which the King of Spain challenges as first discoverer. But as we acknowledge the King of Spain the first sight of the west and south-west parts of America, so he and all the world must confess that we were the first that took possession for the Crown of England of the north part thereof, and not above two years difference betwixt the one and the other. And as the Spaniards have from that day and year held their possession in the west, so have we done the like in the north. And though there is no respect, in comparison of the wealth, betwixt the countries, yet England may boast that the discovery, from the year aforesaid to this very day, hath afforded the subjects annually one hundred and twenty thousand pounds, and increased the number of many good ships and mariners as our western parts can witness by their fishing in Newfoundland.*

* A document of 1634 gives the yearly average, from the western ports, in the Newfoundland trade as 26,700 tons of shipping and 10,680 men (*S. P. Dom. Chas. I.* cclxxix. 70, 73). This represents, probably, its high water mark; but during the reign of Elizabeth it was the Newfoundland fishery, and not privateering, that stimulated the production of seamen in the west country.

Neither can Spain challenge a more national honour than we to its discovery, for in that case we are both alike. If we deal truly with others, and not deprive them of their right, it is Italy that must assume the discovery to itself, as well in the one part of America as in the other. Genoa, and Christopher Columbus by name, must carry away the praise of it from Spain; for Spain had not that voyage in agitation, or thought of it, till Columbus not only proposed but accomplished it. The like may be said by John Cabot, a Venetian, who by his earnest intercession to Henry VII. drew him to the discovery of Newfoundland, and called it by the name of Bacallaos, for the abundance of fish he found upon that coast.

And, speaking of plantations, I will begin with Newfoundland itself, which lay uninhabited, and the country unthought on to produce profit, till my Lord Baltimore, and some merchants of Bristol undertook it.* It may be they were the rather drawn to it by the plenty of fish, not once doubting of the soil because they had no proof of the winter's habitation. And they might think that a fresh and green show of a hopeful summer to the eye, such as England yields, would send forth the like winter and the like effect in winter; but by trial it failed, and proved a chargeable adventure and the decay of my Lord's estate. He returned for England, where once more he resolved to try his fortunes in a new plantation in Florida; † but in the mean time, and in the year 1632, he died.

Let not this colony of Newfoundland eclipse

* In 1621.

† Now the State of Maryland. The coast of the United States, from the Chesapeake southwards, was all termed Florida until the progress of settlement caused more definiteness in the demarcation of territories.

my Lord's judgement, or the adventurers with him. The chiefest exceptions against it is the coldness of the climate, and the like might have been said of England upon the first plantation of it; for they lie both in one parallel. Newfoundland affords in view plenty of wood, grass, water, and other hopes of commodities, till time and experience gave light to the contrary; and at the first, therefore, not to be disproved till a winter had made known the condition of the soil. They had another help to better their plantation in that they were in no danger of savage enemies, which all English colonies are subject to and have tasted the mischief of. But, above the rest, if the land had proved suitable to their hopes and worthy of inhabiting, they might have planted and supplied it at less than half the charge and expense of other colonies where the English are seated; for that there resort yearly one hundred and fifty ships out of England to the fishing in Newfoundland, which ships go not half freighted, and not above fifteen or sixteen days' sailing with a reasonable wind, that would be glad at a small rate to carry any provisions for the advancement of the plantation.

And, seeing I have begun with America, I will take it in my way, not having relation to the years of the first plantation, but the neighbourhood to one another and to the places where they are seated. And the next, according to the latitude, is New England, whose sea affords excellent and choice fish, whither divers ships of England yearly resort to take and disperse it into several countries in Europe. The land, by men's endeavours, will be made to produce sundry commodities, as a book that is published can witness; but for want of time, for yet it is but a child and

lately born and inhabited, little can be said of it, more than a mistrust of the good success thereof through the humours of the religious people that possess it, being refractory to the settled church government of England. From thence, running south, we arrive at Virginia, a place evil chosen for seat, soil, air, or any thing else to give encouragement for a plantation; yet seeing it was begun, and that the undertakers would not seem inconstant to change their first resolutions, they have, since 1602, continued a footing in it, with costly adventure, though hitherto it produced little more than tobacco. But this nothing lessens the worthiness of the undertakers, whose end is the general good of the commonwealth.

Not far from thence, to the southward of it, in the year 1585, a colony was sent to settle in Norumbega, by the procurement of Sir Walter Ralegh, a man much favoured and graced by the Queen in those days; and the man chosen for the conduction of his ships thither was Sir Richard Greynvile, who upon his arrival was to leave the government to Mr. Ralph Lane. And though the situation, the climate, and the natural soil, and the proof of the commodities the country yields, was able to give encouragement for the prosecution of it, yet for want of means and willing minds, which is the bane of all undertakings, it failed, and produced nothing but tobacco, which has brought a greater mischief to this kingdom than the profit would have countervailed though it had proved successful.

Later than all these, and, indeed, which is now in the infancy, is a plantation in Florida, and near to an ancient colony of the French, who through ill government were in the end forced to quit it. He that can judge of things must confess

that of all other plantations this gives the greatest hope and comfort, by proof that hath been made of it, and the temper, and the height it lieth in, if it be carefully followed and sufficiently supplied. One danger must be eschewed, which other nations have found the smart of, which is the untamedness of the wild Indians, who are cruel to themselves, and worse to strangers, as both the French and Spaniards have tasted. God send them fortune that live there, to their desires, so they make not England still unfortunate with tobacco.

East-north-east from Florida lies the island of Bermudas, inhabited and peopled by our nation, whose extent can yield no greater profit than the circuit of the ground can promise, being but thirty miles in compass. By means whereof the planters are forced to till and manure their grounds in that excessive manner that in a little time it will not be able to sustain their people but force them to find another habitation, which will move the less pity because they seek only to plant for tobacco, a thing so noisome and loathsome to this kingdom. This island, at the beginning, was discovered by the Portuguese nation, and inhabited by them till they found little profit grow from it, and then they abandoned it and left behind them such food, especially hogs, as they could not carry with them. And thus it lay waste for many years with a general opinion to be inhabited with spirits, which made all men shun the sight of it at their return out of the Indies : * though this error was easily salved for I knew,

* The 1615 edition of Stow's *Annales* speaks of 'the dreadful coast of the Bermudas, which island men of all nations said and supposed to be enchanted and inhabited by witches and devils, which grew by reason of accustomed monstrous thunder storms and tempests near to these islands.'

above fifty years past, one Captain Russel, a Frenchman, shipwrecked upon that island. And with great industry of his people, for few of his men were lost, they patched up a boat out of the materials of the perished ship, that carried them to Newfoundland, where they found relief and passage into their own country.

I knew likewise, in the year 1593, another French ship wrecked upon the same island in which an Englishman, one Henry May, was passenger, he having belonged to one of the ships Captain George Raymond had, when he was drowned returning from the Indies. This May, and some few men of this French ship, were preserved, and made shift, as the others did, to get to Newfoundland.*

This plantation of Bermudas was not purposely undertaken by us but accidentally fallen upon by the like shipwreck in Sir Thomas Gates and Sir George Summers their passage to Virginia, whither they were bound.† And being delighted with the pleasures of that island, which was so well stored with hogs, they seated their colony remaining in it. Since then they found a reasonable quantity of ambergris floating out of the sea, and not without reason, for the coast of Florida, opposite to it, abounds in ambergris.

The next, and more to the westward from thence, are the islands of Barbadoes and St. Christopher's. And whereas the Canary Islands were formerly called the Fortunate Islands, so would we have these islands called the contrary, *viz.* the Unfortunate Islands, in that they produce nothing but stinking tobacco; which, if men would judge wisely, they would discern the mischief

* See *ante*, p. 183. † In 1609.

that ariseth from it. But it carrieth such a bewitching power over the takers that all the ill which comes of it they interpret as good to their bodies, and have no more power to leave it than drunkards when they are muzzled in it.

The next, and upon the next continent, is Guiana and the river of Amazons, where there have been many colonies settled by our nation in that vast and spacious country. Yet I could never hear of any commodities that rose by it, or not so much in value as two miles of ground in England would afford; and yet I must rightly say of that evil tobacco that this plantation sends the best, if the strength of tobacco be so accounted. The benefit of this plantation is that the savages are more civil and tractable than in other parts of America, and that the climate and soil give hope of some good to come of it. But where the Dutch have had footing, and quitted, it takes away my belief of it.

Further to the southward of this coast the English never sat down with a resolution to plant. And yet there are many ships that have made sundry voyages, some to trade, others with letters of reprisal, as well upon the coast of Brazil as through the Straits of Magellan, who have after coasted to Chile, Peru, Panama, New Spain, and cape California, and took their leave of America, and the westernmost cape Mendocino, the farthest land discovered.

Our Trade to Africa and Asia.

The next addition of our new trade is upon the continent of Africa, as far south as the Cape of Good Hope, and then eastward to the cape of Guardafui, which is the sea circuit of Africa.

From thence we will pass over to Asia till we arrive at the Molucca Islands, Japan, and the continent of China, to all which places we are now no strangers by our late navigation.

The first country, and the nighest to us, where we settled a new trade, not frequented by our forefathers, was Barbary, under the King thereof, called Muley Abd-el-Melek, in 1577, who gave the English large and fair conditions, as appears by the privileges extant. And from that year to this very day we have enjoyed the same, and so prevailed with succeeding Kings that we have beaten the Portuguese out of that trade, who at first laboured to do the like to us.

In our time of wars with Spain our ships of reprisal have received great comfort and relief of the two ports or roads in Barbary, which, upon necessity of victuals, water, and other wants, they have supplied us withal, and taken from us such goods, by way of traffic, as we have made sale of; but with that craft, subtlety, and danger of betraying us, that he, who knows them well, would no further trust them than necessity would compel him. The Barbarians had so much honour and civil honesty that, if a Spaniard and Englishman were in their ports together, they would forbid the meddling with one another, being enemies, so great a regard they had to the King's royalty. As otherwise, if they were never so little way off at sea, and one of them taken by the other, if he that took would bring her taken into the port again they would hold her prize to him and give money for her.

I remember the like case in myself, Anno 1587, that coming into the road of Saphee, I found a ship of Catalonia, a subject to the King of Spain, there trading. And the English merchants on

shore fearing I would make an attempt upon her, being warranted by my commission, besought me not to offer violence in harbour upon her, assuring me that if I did the King would take occasion to confiscate all the English goods in his country, and to imprison, and, perhaps, put to death, the merchants. Whereupon I forbore to attempt her when it was in my power to possess her.

The western parts of Barbary have two open roads, Saphee and Santa Cruz, out of which the ships that ride there put to sea, when they find, by the bellow of it, the wind likely to endanger them with a westerly gale. Our English ships riding there have often been forced to put to this necessity for their safety. And many times before their return they have met and taken several Spanish prizes, which have been more beneficial to them than their merchantable voyage has proved.

And, to conclude with the trade of Barbary, I must say that though the English in time of war have often brought the subjects of the King of Spain prisoners into the ports, and though the Moors did more value buying these men than merchandize, yet how lewd soever the Englishmen were, or what necessity soever they were driven to, it was never known they made sale of one Christian.

The next bordering country to Barbary is Guinea; unhealthy, through extremity of heat and infection of the air, for which there are many reasons alleged, and antidotes invented to avoid the contagion thereof. But all in vain; for the putrefaction of the air is occasioned by the huge and monstrous beasts that country abounds in, which when they die, by reason of the excessive heat, cast such an intolerable stench that infects

and putrefies both air and earth to the destruction of mankind.

The discovery of Guinea, and the sovereignty thereof, was given to Dom Affonso V., King of Portugal, in 1470, which he enjoyed peaceably, and without interruption or challenge by any nation, till the year 1481. Then a voyage was intended by certain English, and the negroes themselves as willing to accept of their neighbourhood, with offer to give them a proportion of land, there to live and fortify. But this design was frustrated, and proceeded not, at the instance and request of the King of Portugal, Dom João II. to Edward IV., King of England.* And since that time, to this very day, a footing in Guinea was never attempted or desired; which must be conceived to be out of the unwholesomeness of the climate and the air.

But though we were not resident in Guinea, by any place in the country we posesssed, yet have we continued a yearly traffic to sundry parts of that coast on this side the equinoctial line ever since the year 1553 till this present 1632. And many corporations and patents were granted by Queen Elizabeth to her subjects of Exeter, and other the western parts.† Another benefit we have made of that country is the relief it has given us in our longer voyages, as to Brazil and the South Sea. For all ships of ours that have passed the Straits of Magellan, found succour and refreshing at the port of Sierra Leone, where, at this day, we have a certain trade.

From the port of Senegal, in Guinea, we have made several attempts to discover Timbuctoo and Gogo, two places within the inward parts of

* See Hakluyt (ed. 1903), vi. 123.

† In 1588.

Africa, which afford the greatest quantity, and the purest and the best gold in the world; and from whence the King of Morocco, or Barbary, is furnished with all his gold, by his caravans he sends thither in great peril of life. For many times they are swallowed up in an ocean of sands.

From this part of Guinea, or rather from the cape of Lopez Gonzalez till you come to the Cape of Good Hope, no Christians have traded with the negroes but the Portuguese themselves. In which course is seated Angola and Congo, which is inhabited by banished men sent out of Portugal for offences there committed; a place of that infection as that it is fit only for men of that condition. And from those places they furnished the West Indies and Brazil with numbers of negro slaves who work in their mines and sugar-works.

As Sierra Leone has been a relief to our nation in our longer navigations, as I have declared, so is the bay of Saldanha, within twelve leagues of the Cape of Good Hope, a succour to our ships of the East Indies. For thither they resort in their going and coming from thence, though it yields no benefit but victuals and water, for which they truck with the most wild, ravenous, and irreligious negroes in the world. Yet it is of greater importance to our ships than if it yielded a rich and commodious trade.

From the Cape of Good Hope there are two passages or navigations to the East Indies; the one by the way the Portuguese sail, keeping the African shore on the left-hand or larboard side, which course we likewise take with our ships that trade to Cambay, a country subject to the Great Mogul. And in going there they sometimes touch at the island of Socotra, upon the mouth of the Red Sea, and where St. Thomas was shipwrecked.

This island yields our merchants the best Aloes Socotrine in the world; and not far from thence it affords them as good commodities as the fleet of Mecca could send out; which I forbear to speak of. And of late, by that track, we have found the trade of Ormuz; which island we gave the Persians assistance to take from the Portuguese though I do not commend that act, in joining with Turks against Christians.

Surat and Cambay, and that coast, afford us good and commodious traffic, though the Portuguese seek to impeach us. But besides the going and coming home of our ships from thence, as also of other parts of the Indies where they remain, they are freighted, or else freight themselves, from port to port, to their exceeding great profit and gain, by example of our ships going to the Straits that do the like.

The other navigation from the Cape of Good Hope is to the southward of the island of Madagascar, or St. Lawrence, but not frequented by the Portuguese but upon great necessity, when they are forced to it in great penury, not being able to recover Goa or other part of the Indies, as in my former book I have related. But to us that resort to Bantam and the Moluccas, or other parts of the Indies thereabouts, it is far the nearer and much the safer; for we sail in a more open sea than the Portuguese do to Goa, where they meet with many rocks and shoals.

When our ships arrive at the settled ports where they are expected their trade is certain, and their return so usual that there needs no repetition thereof. But our people, like Alexander the Great until he had seen and conquered the whole earth, not being contented till they had discovered such countries and places as fame made

report of, from hence they made an attempt upon the discovery of China, Japan, and the farthest remote places of the world, being led to it by the rumour of the magnificence and wealth of them. But it proved, like many other reports, rather shadows than substance; for though the people of China deserve more praise than others for excellence of arts and ingenious inventions, yet it is far short of the wealth that is said to be in it to our western parts of Europe.

This discovery hath resolved us of the state of those parts, which we so long desired to know since we heard the fame of them, which made Queen Elizabeth often send her letters to such princes as dwelt thereabouts, and devised how to convey them and have answer of them. So desirous she was to understand the conditions of those parts that she employed some of her own subjects by the way of the Gulf of Persia, thinking to find the convenience from out the East Indies; but still failed by the sinister practices of the Italians, who incensed the Portuguese that they came for spies, and caused them to be apprehended and imprisoned, where they endured great affliction before they returned into their native country.

What I have said is sufficient to prove that our new and later discovered trades have far exceeded our ancient and long accustomed commerces, before the year 1586, not only in value of wealth, but in distance, whither they resorted for them. And it is made apparent that no part of Africa, America, or Asia, that any nation has traded to, but we have done the like. And that whereas in some places they have sought to impeach and restrain our trades, yet we have forced them to it and brought them to our own

conditions. And this shall suffice for the southern and western parts of the world.

Our Trade to other Parts nearer to us.

Now I will once more come nearer home, and put myself into the trade of the Straits, being more pleasant, gainful, and less dangerous or laborious than the rest I have treated of. My first voyage shall be into the Mediterranean Sea, unworthy of the name of a sea, by reason of its straitness, in comparison of the great and spacious Ocean.

This sea, being anciently known to us, but not frequented for these reasons—former times did not afford shipping sufficient to follow it; secondly, such goods and merchandize as those countries yielded were received from hand to hand by themselves and we served by vessels of their own; thirdly, we could not pass without great peril and danger of the Turks, who surprised and imprisoned us. Whereupon the Venetians engrossed the whole trade upon those seas, and furnished us with the rich merchandize of Turkey, Persia, and India at what rate they pleased themselves. And yet this was not all; for they laboured to make us strangers to the great Turk, the Egyptians, and bordering countries, and brought them to that ignorance of our nation that they thought England to be a town in the kingdom of London.

The Venetians sent yearly their Argosies to Southampton; which town enjoyed a charter from the Kings of this land for them to resort thither with their sweet wines, which charter was wrested out of their hands by the Earl of Leycester, greatly to the decay of that town. And the Argosies

since then have become strangers in England ; the last whereof took her leave with an unfortunate end, which my eyes were witness to, in the month of October, 1587.

This goodly ship, of one thousand one hundred tons, being richly laden with the accustomed commodities they use to serve the kingdom with, and being come as high in the Channel as the Isle of Wight, which land the English pilot visibly made. This pilot, called Foster, for his excellent skill was not long before redeemed out of the Turkish captivity by the Venetians, to serve in this voyage. Upon this good landfall, the pilot put the passengers in hope, many of them being of great account and esteem, the next morning to harbour them ; for night growing on he would not hazard to put in with the shore that evening. But the gentlemen being impatient of delays, and the land appearing to them, they thought themselves free from all danger, which is the common ignorance of many that know not the seas. But, to be short, they compelled the pilot by force to go room and put in at the Needles, the westernmost part of the Isle of Wight. When the poor man, neither with persuasions nor tears, could prevail, he did his best to enter the channel of the Needles. But such was the greatness of the waves, and the unwieldiness of the ship to feel her helm, that she struck upon the Shingles where she, her goods, and company, except seven poor creatures, perished.

The sea betwixt the island and the main land was enriched by her loss with several sorts of merchandize. What was saved was not worth speaking of. I had the fortune to light on two butts of muscadine floating on the sea ; for then was I riding at Cowes, in the first ship I ever went

captain of. I found these two butts of muscadine a great help to us in our voyage, when we were reduced to extremity for want of victuals.

About this time our merchants of London began to take into consideration these great and inestimable riches brought into the land by the Venetian and French, who absolutely enjoyed the trade of Turkey; and a great part of that wealth which came out of Persia and India was retailed from them to us. They devised how such commodities might come to our hands by a more direct way, than to be served as we were at second-hand; and therefore resolved to make an overture by favour of the Queen, and her letters to the great Turk, for an immediate traffic from England to Turkey, and his dominions, and so home again, with ships of her subjects without being beholding to others. These letters were sent by her Majesty, and received with great humanity and courtesy by the Grand Seignior, as appears by his letters yet extant. He could not give more respect and honour to her Majesty than he did by shewing a willingness to embrace her gracious propositions of trade. And, in conclusion, articles were agreed on, and a grant of great privileges to her Majesty's subjects, which have ever since continued and been peaceably enjoyed.

We may reckon from this time the decay of the Venetian State in matters of trade. For Argosies, which were wont yearly to visit us, are now unknown to us, and we possess the wealth they were wont to reap. The commodities of Persia and the East Indies are brought by ourselves, in our own vessels, by the way of Turkey, where we have obtained as great a freedom as we can desire. In such places as the Venetians were wont to take freight in their ships, to transport

from port to port, we now absolutely enjoy that privilege; for all strangers are more desirous to put their goods into English bottoms than theirs.

Whereas we were wont to be served with great part of our spices from them, and they, by the way of the Red Sea, out of the Indies; now the passage is better known to us by the Cape of Good Hope than to the Turks themselves. And instead of receiving India commodities from them we supply as well them as the Turks with the same out of England. And lastly, the terror of the Turks' galleys, to impeach our trades in the Straits, is now taken away, by the privileges obtained from the Grand Seignior, and we may hold our ships in as great security as themselves. And moreover we may boldly say we have sustained less loss by the pirates of Algiers than they have done; which pirates of late years have been the scourge of the Christian trade.

In old time Venice flourished in ships and galleys above all other ports or parts of the Straits, though there were a competition betwixt them and the State of Genoa. And it is not unworthy of note that the first use that was made of ordnance and small shot, after the invention of it in Europe, was in a naval battle between the Venetians and the Genoese.

This shall suffice for our southern, western, and eastern trades, or within the Straits, as high as Constantinople, Egypt, or other places under the jurisdiction of the Grand Seignior. I will now return to the north, and cold countries, as I have already done through the south and its parching heat.

Sebastian Cabot, a man before spoken of, having a sharp, acute, and solid brain, applied himself to the imitation of Columbus, who by

his late and happy discoveries had enriched the world with wealth and himself with reputation. Cabot being carried that way of honour out of a Christian respect to reduce the world to a perfect knowledge of God, or out of a hope of riches, it being the natural disease of mankind, or out of ambition, to make himself equal in fame with Columbus, or out of a desire to perform what he had long thought of, which was to sail round the globe of the world—which of these was his design I cannot say but charitably will conceive the best.

Let it be what it was, I find an extraordinary and hearty desire in him to enrich the English nation by adventuring his life in sundry attempts, and by his wit to lay open what his reason and experience had conceived upon reasonable grounds, and by his labour and pains to effect what he had so wisely projected, as appeared by setting afoot the northern discoveries. There wanted no thankfulness in those days, either in King or country, to do him honour. And for requital of his travails, both in body and mind, he was chosen governor of the Merchant Adventurers for the discovery of new regions, dominions, islands, and other places unknown, in the reign of King Edward VI. and a pension assigned him.

He gave the only information and instruction to the new begun voyage and discovery of Sir Hugh Willoughby in 1553, which, though it proved unhappy to Sir Hugh himself, his ship and company perishing with cold in the port of Arzina in Lapland, yet his third ship recovered the harbour of St. Nicholas in Russia,* where he settled a rich and commodious trade, prosecuted to this day by

* The English trading factory on the left bank of the Dwina, opposite Archangel.

the merchants incorporated and called The Muscovia Company. The English not thus ceasing, but as men travelling, who arriving at a port or city where they had never been would be inquisitive to know and learn the state of the country and its neighbourhood, without resting till they had satisfied their curiosity; so our English merchants finding the Caspian Sea famous by report, yet unknown to us, and its bounds one way upon Muscovia, they devised, though the journey was long, troublesome, and dangerous, to arrive at that sea, by the approbation and consent of the King of Russia; and from thence to make trial whither the said sea would conduct them.

This was no sooner conjectured than effected; and our merchants furnished themselves out of England with carpenters, mariners, and other necessaries, to build a ship for such a voyage. This ship was twenty seven tons burden, and the first that ever wore the English colours upon those seas. From Russia they arrived in Persia, not once, but often, as appears by Mr. Jenkinson's relation. Thus was Persia, and all the countries adjacent discovered by us; first, to the northward as far as Russia; after to the Caspian Sea; neither of them both being known to our forefathers.*

The English did not thus rest; but as they were led to those unknown seas by a kind of fate so they supposed the same sea did not end thereabouts but had a passage farther to the eastward which, perhaps, being discovered, might

* The best modern account of Anthony Jenkinson's travels will be found in Mr. E. Delmar Morgan's *Early Voyages and Travels in Russia and Persia* (Hakluyt Soc.). London, 1886.

lead to Japan and China. And thereupon, for the shortening of the discovery, they sent a small ship at the spring that wintered at Kholmogory, eighty leagues from St. Nicholas,* which set sail from thence to find out the conjectured passage. This bark used its endeavour, so that no blame could be laid upon the master or the company; she passed to the eastward of Vaigatz, where she was interrupted by extremity of ice and snow and forced to return from whence she departed.†

This did nothing dismay the hopeful enterprise of the merchants, but once more they made an attempt with two pinnaces directly from England, the masters whereof Arthur Pet and Charles Jackman, with the same instructions of the other bark, wherein Stephen Borough had been, to find out the end of the eastern sea. But being likewise encountered with the extremity of weather, the one returned, the other perished though both of them did their parts very sufficiently.

Being now hopeless by their often repulses they found in the north-east passages, yet they would not let die what they had in agitation for finding the South Sea, as the *summum bonum* of all other voyages. For from the western part of America, which bounds upon that sea, is sent forth the greatest quantity and mass of gold and silver the earth affords. Whereupon they left this attempt to the eastward and made trial of that to the westward, for they imagined that all great and large seas have a correspondence

* On the Dwina, 100 versts inland from St. Nicholas.

† Monson evidently took less interest in the north-east than in the north-west passage. This is the voyage of Stephen Borough in the Searchthrift in 1556.

with one another, without let or impediment, if it could be found.

The first man that made the enterprise, as well upon the country of Baccalaos, which he found and named so, as also in his offer to look out a passage that way, was Sebastian Cabot aforementioned ; * but failing of the passage he hit upon the land. But, by reason of the vehement cold at that time of the year upon that coast, he stood to the southward, and from thence into England, taking possession of the country for the Crown of England along the coast he went.

This voyage, and many more to those parts, was set out by the city of Bristol which to this day continues its fishing at Newfoundland. But, for the discovery of the north-west passage, the man that most laboured and waded in it that I could ever learn, was Sir Martin Frobiser in three attempts : the first in 1576, the second in 1577, the third in 1578. After this, and in the years 1585, 1586 and 1587 Mr. John Davis undertook the discovery, but failed, as many others have since done ; which is no wonder, for he that will read a discourse of the north-west passage, in this book, shall be satisfied it is a vain and hopeless thing. And so has Captain Fox, that was employed upon it in 1631, at his return confessed to me that he found my reasons unanswerable which I shewed him before his going.†

Now to come to my own observations. I do hold that next to the discovery of America, and the wealth thereof which it sends into Spain,

* Throughout this book Monson confuses John with Sebastian Cabot.

† Captain Luke Fox's book on his voyage has the curious title of *North-west Fox, or Fox from the North-west Passage, etc.* . . .

the Spaniards have greatest cause to give God humble thanks that our attempts of the north-west have failed. For thereby they enjoy the absolute benefit of the South Sea, and the incomparable wealth therein, without molestation, fear, or disturbance of any other nation. Whereas, if the passage had been known, no Christian prince but would have strove to have had a part with them; and now it is in vain by any great attempt to prejudice the Spaniards by the Straits of Magellan, which is the only known way thither. It is as vain for any enemy to possess and inhabit some of the towns there planted, in respect the distance and danger takes away all hope to be seconded and supplied out of Europe. And, lastly, though they should be succoured by the long and large way of the East Indies yet the contrary wind, continually blowing, will make it impossible. I refer the reader to what I have said before of other discoveries that failed, and particularly to that, than which nothing can be said more to the honour of the discoverer Sir Francis Drake, in whose voyage about the world may be seen what he did and attempted; and, therefore, I shall not repeat it here. But to proceed.

Comparing what I have said of our former discoveries, our laborious plantations, and our new found trades, with our present intended fishing—which of them will yield greatest wealth, strength, and ease I have made appear in my Sixth Book. And therefore I present you, that now live and are in being with it, to judge which is good and best. For though it is true what is done deserves the name of good and immortal praise; so that which is now in hope to be done does far surpass the former, and is to be achieved

with less difficulty, less peril, and less loss than the others that have made our nation so worthily famous.

* When the contents of the Sixth Book shall be maturely considered, the painstaking industry of the Hollanders will plainly appear; how they have raised themselves, and their new erected commonwealth to an equality with princes. Now shall it rest a little to distinguish of their good deeds and bad; for fortune and fame gotten by craft are commonly of no continuance but lost with shame.

What is due to them in praise of their virtues I will not rob them of; for I hold it a sin to belie the wicked. They are frugal in expense, the benefit whereof themselves and country find: they are industrious, as their actions abroad and at home demonstrate; they are just in contracts, making a conscience in the little religion they have not to defraud a man: they labour to find out the secrets of lands uninhabited and countries undiscovered; they are inventors of arts which, to their praise, they enrich the world with: they are willing without excuse to contribute to any good for their State, not standing so much upon privileges or petitions of right as to neglect any occasion of advantage to benefit the commonwealth: they are laborious and painful of body, not admitting a beggar in their provinces, and willing to relieve and comfort one another in strange countries; they are enemies to the

* The remaining portion of this section has been transferred by the Churchill editor from Book vi., away from its context where Monson is again attacking the Dutch. It has, however, been considerably improved in style, and in some places expanded by the former editor who, it may be surmised, disliked the Dutch nearly as much as did Monson.

expense of law and the griping of lawyers, and end most of their controversies by arbitration of friends; their expense in drinking is saved and mitigated by their misery in eating, for out of their excessive covetousness they almost starve their bellies, and by their unmeasurable frugality they scarce clothe their bodies; for it is supposed, that their people, in one of their best cities, spend not in apparel the value of a prince's coat in a year.

But all these virtues are drowned with a covetous ingratitude which has friendship with nobody but for interest; and no marvel, for popular States are no longer thankful than they receive benefits. There is nothing of shorter life among them than the memory of pleasures and favours past. They are so careless to give satisfaction for the evils they do that if we demand it at their hands it is as much as to speak of valour to a faint heart, or charity to a merciless man, or a courtesy to a churlish disposition; it will prove but telling a tale to him that is asleep. The definition of philosophers in matters of friendship is as follows: 'A friend is long sought for, scarce to be found, and hard to keep: a friend is always ready to comfort in adversity, to help in necessity, to bear with one's infirmity, and to reprove one's error gently.'

But the Hollanders are otherwise in their friendship. They are like an ill bird that lays an ill egg, an ill tree that bringeth forth ill fruit, or a young cub that grows crafty like his dam. They do patricise,* and follow the steps of their predecessors that make riches their heaven. And whereas it is held no hurt to know evil, but to

* This word is not in the *New English Dictionary*.

do it, those people are very perfect artists in their trades, as well in doing as in knowing evil.

But, to speak the truth, their natural evil has been nourished and made worse by us. For if we had not connived at them and their actions, to our prejudice, they had wanted power to have executed their ingratitude. Therefore in reason it had behoved us to consider what we gave before we gave, to whom we gave, or how we gave. For States ought to be governed by wisdom, and not by popular affection or passion. Wise men should not measure things by outward appearance, but by discretion and reason, or else they behold their actions in a false glass. But let us now at last seek to avoid that evil we have done in making the Hollanders too great for us to tolerate, lest we feel the effect of repentance. It is not the meanest point of wisdom to doubt and mistrust the worst; for doubts beget understanding and thereby prevention.

As, in natural bodies, the longer one lives in health sickness is the more dangerous when it comes, so it is with us and the Hollanders the longer we have lived in a mutual and inseparable peace. Now that they have over-wrought us with cunning, and made us feeble by the strength they have sucked from us, it will behove us to recover our ancient vigour and valour and be no longer deluded with false pretences, as safety to us and the commonwealth. Let us seek to follow the old rule in seeking to quench the fire in our neighbour's house, though it be our enemy, lest it should flame into our own. For it is an easier thing to meet a danger abroad than to repulse it at home.*

* In view of the many and particular reasons Monson gives for the precise and comprehensive curses he lavishes

In this book I have said little to prove what I have promised in our intended fishing but refer the reader to my Sixth Book, and last, dedicated to his Majesty. And, seeing I have made a relation of all discoveries and plantations of Christian people, I will end that subject with a plantation of the French, for discoverers they cannot be termed, which is the next that follows.

upon the Dutch, individually and nationally, at every opportunity it is strange that he makes only one slight allusion (p. 237) to the Amboyna massacre of 1623, which would have really justified anything that he could have said. It roused all England to fury, and was one of the items to which 'paid' was put in 1654. As it is, his virulent abuse only calls attention to the fact that he knew or guessed that the Dutch were shrewd enough to suspect him of being what he was.

Certain Plantations of the French Nation.

THOUGH we cannot call the French discoverers of countries, because they never sought to find out any new worlds or passages that were not found to their hands, yet, since the first discovery of other worlds, they have been always ready to infest them with piracy. And such voyages, as their going to Peru, has been no other than to spoil and rob other nations.

And yet I must give them their due in what they have deserved. For though they cannot be called discoverers, as I have said, yet they may worthily be counted in the number of planters, as well in the north part of America from the line, as in the south beyond the line, and upon the continent of Brazil.

To the northward they have inhabited the river of Canada, where they have found a rich commodious trade of furs where the English supplanted them in the late wars betwixt us and France. The next place they had footing in they themselves called it New France. The third habitation they made was in Florida. And the fourth, as I have said, was to the southward of the line, and upon the continent of Brazil; all which I will particularly handle.

But before I treat of them I will lay a blemish and tax upon their nation. For some of their authors stick not to assume to themselves the names of discoverers of such places wherein they were but planters; herein they do manifest

injury to the English, Spaniards, and Portuguese. For all nations do, and justly, attribute to them the finding of those countries, as I have formerly declared and proved; the one by John Cabot, the other by Pedro Alvarez Cabral in his voyage to the East Indies in 1500, being the second that was gone after the first discovery. And now I will proceed to their plantations and success in them.

The first undertaken voyage to Canada, for I will begin with the north part of America, was enterprised by Giovanni da Verrazano a Florentine, in 1524, employed by Francis I. King of France, which Verrazano is said to discover from the fiftieth to the twenty eighth degree of the north latitude. But it is to be disproved in fact; for all the circuit and distance of that land betwixt those degrees was long before discovered by John Cabot, in the right of England, as I have often repeated. The next that undertook this enterprise was Jacques Cartier of St. Malo, in 1534, with three ships, wherein that winter twenty five of his men perished with cold. But, however, the King prosecuted the voyage both in the years 1540 and 1542, and the French have ever since had a yearly traffic upon that coast for trade, as also in fishing, insomuch as it is written, that one Sevales made forty two voyages in person into those parts. The next habitation the French undertook was in the year 1603 into the country named (though improperly) New France, which truly and properly belongs to England, as I have said before. For if the first discoverers be not allowed owners of the land they discover, by a law amongst Christians, we, and all others, have as much right to the Indies as the Spaniards and Portuguese themselves.

In the year 1603, Henry IV. King of France, the 8th of November, granted a patent to Pierre du Guast, Sieur de Monts, for a plantation of those northern parts of America. This voyage was begun the 5th of March the same year by Samuel de Champlain of Brouage, who inhabited it unjustly and gave it the name of New France.

This Champlain was a painful, industrious, and a laborious undertaker. He passed many dangers, wonderful travels, adventures, and treacheries often practised against him, as well by his own people as the uncivil savages; and to second this enterprise, Monsieur de Monts, the patentee, went thither himself in person, in 1604, with the like success as all planters in those northern parts have found, *viz.* variable hopes and fortunes, to little purpose, as appears by divers other voyages made to the succour and relief of that plantation.

The English in Virginia, hearing that the French were become encroaching neighbours to them, and in a country that did properly, and of right, anciently belong to the Crown of England as several patents made it appear which the Queen granted to Sir Humphry Gilbert and Sir Walter Ralegh, knights. And those English fearing that, in time, this intrusion of the French might beget a custom, and that prescription and possession might make a cavil in the French to insist upon a right, therefore the governor and council in Virginia, in the years 1613 and 1614, advised and undertook to find out what the country produced, as also to be better informed concerning the French plantation, which they were only told of by certain Indians.

After some time spent in coasting along that shore at last they arrived at the port and fort

where the French had made their habitation, and finding in the same harbour a ship of France belonging to the planters, the English, suddenly, and at unawares, surprised her, without the loss of a man on either side, except one French Jesuit, who was slain even as he was ready to give fire to a piece of ordnance aimed against the English. The French in the fort being dismayed by the loss and disaster of their bark, the English landed with great celerity. Whereupon the French desired a parley, and time to consider of their surrender; but this request would not be granted and therefore they secretly conveyed themselves presently out of the fort and in a hidden manner escaped, and left it to the possession of the English, to whom it properly belonged.

The French governor of that colony being expelled, and wandering up and down without a house to put his head in, sent to treat with the English commander, offering to become a subject to the King of England, and to hold his possession of him and his Crown, pretending to discover many secrets of mines, and other riches, not known to any but himself. But the English commander's end being only to hold their right in that country, and having no authority to connive or permit any nations living there but his Majesty's born subjects, he refused all propositions of accommodation, and returned to Virginia from whence he came, and carried with him another Jesuit, companion to him slain, and sent him into England where he received good entertainment. The rest of the French travelled to Newfoundland, where they found passage for their country.

Now let me speak like a Christian, and with a heart of pity, to see so great and good a work

as the conversion of souls from infidelity and paganism should be diverted and destroyed by a vain word of ambition. For, hitherto, the country is not brought to that perfection as to produce any thing that may make it worthy of fame, or a ground for an ambitious man to work upon: for if the quarrel betwixt England and France about those two countries be considered it is like two dogs that should snarl and fight for the picture of a deer or any other beast. For there is little more substance as yet to be expected in this wide, vast, and desolate country that can afford land sufficient to both the nations, if content would please them. I will therefore wish and pray, with my heart, that all princes would put to their helping hands in the planting and establishing the Christian religion in all remote and barbarous countries, and that with one consent they would settle a national law within themselves, and to have it generally received, by agreement, to prohibit violence to any plantations where colonies are seated for the propagation of the Christian faith. As, also, that they would add and consent to the like privileges to all poor labouring fishermen fishing upon the seas that no disturbance may be offered them. Their pains and danger well deserve it for themselves, and no less in respect of the general food which every man reaps good by.

The French had a colony in Florida more ancient, and countenanced by Coligny, the Admiral of France, Anno 1562, a great upholder of the Huguenot sect. He sent for governor Monsieur René de Laudonnière, and Jean Ribaut, who arrived in Florida in thirty degrees, and there erected a pillar with the French arms. At first they were friendly entertained by the savages;

but soon after, according to the nature of the French, who cannot long agree in love together, there happened quarrels amongst them. For the commanders shewed such cruelty and insolence that one of the captains was slain; and, rather than a great part of them would endure what they did, they put themselves in great adventure into a small pinnace to go to their country; but endured that necessity of victuals that they were driven to eat one of their company, and had famished if they had not been relieved by an English bark at sea.

This colony was not relieved according to promise because of the civil war in France; but that ceasing, Laudonnière was sent once more, in 1564, but there ensued such murders, such mutinies, such killing, running away, and betraying one another as it is wonderful to read. And amongst the rest there was one Francis Jean, who, by great accident, got into the Havana and made known to the Spaniards the French plantations and weakness. Whereupon the Spaniards sent some to supplant and weaken them, who used execution upon most of them and possessed their fort. Such as survived were put to most lamentable famine, and, indeed, had perished if Sir John Hawkyns, at his return out of the Indies, had not been brought thither by a Frenchman, who left them a bark and some relief.

In the fourth voyage of the French to Florida they requited the Spaniards as they had done to them before, and hanged and destroyed to the number of four hundred. After this slaughter they returned to Rochelle, expecting great reward from the King for that service; but the Spanish ambassador prevailed so far that the commander durst not appear, but hid himself.

Pedro Melendez de Avilés, the Spanish General, when he exercised his cruelty upon the French writ over their heads, *I do not this as to Frenchmen, but to Lutherans and Heretics*; the French commanders served the Spaniards the like sauce, and writ over their heads, *Not as to Spaniards, but to Traitors, Robbers, and Murderers.* The French after this quitted the country and fort of Florida, and never since have had any footing in it.

Lastly, for the French planting in Brazil; it has been with the like success as in the northern parts of America. The first that undertook it was Jean de Lèry; and the cause for which he undertook it was to plant and settle the new-reformed religion, as they termed it. He had an approbation of it by John Calvin, their sect-master, who much encouraged the action. But it fell out that in time, one sect increasing out of another, as commonly heresies do, instead of amity they lived in a contention, and never ceased wrangling and jangling upon the interpretation of the gospel till it was decided by the pistol. For murders, mutinies, and all other mischiefs ensued upon it; so that in the end Lèry confessed it to be a work of God, as a lover of peace and a hater of divisions. Whereupon he abandoned that sect and reconciled himself to the church of Rome, in which religion he lived and died, as himself expressed in writing.

Andrew Thevet, and after him Hans Stade, were two of the next that followed this plantation. And to make an end of the tragical habitation Diego Flores de Valdes, in his return from the Straits of Magellan, as you have heard, in the year 1582 coasted the Brazilian shore till at last he came to an harbour called Paraiba where he

found five French ships, three whereof he burnt, and the rest he took, and inhabited the fort with his Spaniards. The Frenchmen ran into the mountains, where they lived in company with the savages.

But for a conclusion of these plantations, as well by us as the French, and to avoid prolixity, I will briefly describe the nature of the rude, wild, and savage people of America, who are not to be enticed with sweetness and good usage nor to be mastered by force and cruelty. Generally their religion is alike, though they adore several creatures for God, and every nation has a sundry opinion and practice in their ceremonies; but their supreme God of all is the Devil, the enemy of mankind.

The soil and temper of many other plantations exceeds us in temperature, and planted, manured, and husbanded at the charge of a prince's purse no doubt but they may be brought to a perfect perfection. For the bane of all colonies is private men's undertakings, that are impatient of delays; for, if it yield not an expectation of present gain, they are willing rather to lose their first adventure than to shoot a second arrow to find the former shot. And, moreover, factions arise amongst people that are not governed by a prince's direct authority. Envy reigns amongst them, to see some advanced above themselves, and are ready to cast aspersions upon their rulers, and to tax them with deceit and cozenage whether they deserve it, or not.

I observe in all the English and French plantations the hopes are alike. Sometimes they feed themselves with the conceit of a passage into the South Sea; other times with the riches of mines, and the commodities they produce, and make

large relations to persuade people to persevere in it.

But the conclusion is mutinies, murders, seditious desperate adventures rather than to abide in the state they are, want of victuals, and other calamities, more strange than ancient histories can acquaint us with.

If the charge bestowed upon such vain hopes were valued with the gain they have reaped it were not worth a purse to put it in. And for ours, in England, it would be consumed in smoke; for our staple commodity which it sends out is stinking, barbarous tobacco, from the barbarous savages it is derived; a brave original for civil men to learn and imitate. The French herein far exceed us. For by their industry, and laborious endeavours, they have attained to a rich and profitable traffic of costly furs, which makes our shame the greater when we consider how easily they have effected it, and how profitably they persevered in it, whilst we are sucking of smoke that brings with it many inconveniences, as time has made it too plain to us.*

* In the MSS. the Fourth Book ends here.

Advice how to plant the Island of St. Lawrence, the greatest Island in the World, and reckoned a Port of Africa.

HAVING handled at large the discoveries and plantations the Christian nations have laboured in, and by their industrious pains have brought to good perfection, I will now at last say something of the likeliness of a country that in all probability may produce good. I will only collect some reasons, and refer the rest to the examination and consideration of those that are well inclined to the honourable undertaking and proceeding of new plantations.

There are two particular things to be required in a colony: the one I have already spoke of, which is that it be the act of a prince, and his purse to bear the charge. But if that be wanting, and the action be put upon private men's expense, there are three things to be considered upon such an enterprise; the one, is the length and distance from home; the second, how to supply it with least charge and most convenience; and the third, for hiring of vessels for transportation of men and materials. The condition of which ships must be according to the place they inhabit, and the enemies they are to fear.

This being done, the next consideration is the climate, the nature of the soil, and what profit it will yield at present. As also what hope of future profit, the nature of the people, and whether they

may be made capable of reason and be reduced from their barbarous incivility.

Of all the places I can think of, for convenience and profit within the bounds of America, Africa, or Asia, out of my experience and study, is the island of St. Lawrence, anciently called Madagascar, five hundred leagues from the Cape of Good Hope, the greatest island in the world, and the place of all others I principally commend. For our planting will be in fourteen degrees of south latitude, where our English are now no strangers, for commonly they refresh themselves and find succour in their voyages to the East Indies.

There is nothing that I observe to further a plantation but this will yield: first, the winds are certain, at the time of the year, to carry us directly thither without striking sail: and though it be farther distant from England than Virginia, or that part of America, yet I hold it will be often sooner gone to than Virginia, where the winds and weather are both uncertain in going and coming. Secondly, whereas the charge is great to hire ships purposely to transport men and provisions to America, and the numbers being many they are subject to sickness, and other disasters of the sea, I do make account that it may be so ordered and contrived that every ship trading to the East Indies may be hired conveniently to carry twenty planters, without annoying or pestering the ships, being spacious and of great burthen. And this will prove less charge to the undertakers than to hire them purposely for Virginia.

And if we examine the nature and condition of the country, and the people that inhabit it, with the experience we have of our Englishmen that resort thither, we shall find the climate singular

for health, and the ground fruitful to produce wealth, as the great and extraordinary oxen the place affords can witness. This alone exceeds all the hope America can at present yield us. For our increase of cattle upon that continent must be raised by such beasts as are carried out of England, which must be done with great charge, trouble, and long time before they be brought to perfection. The cattle we shall there find will bring us a certain commodity of hides; and as we shall seek to increase them so will our gain and profit increase the more.

What other benefit we shall make by this plantation time and our own endeavours will make it appear. For the two barks which I wished to be kept there for intelligence from other places, I would wish that the one should discover the south part of the island, and the other on the north side; and to make their rendezvous at the same place from whence they departed. So shall we discover the very heart of the whole island, and no doubt but we shall discover variety of gainful things unthought of by us as yet. I have known of my own experience, and by examination of divers Portuguese with whom I have spoken, that the Moors who live and inhabit the main continent of Africa, over against it, have a singular trade with the people of St. Lawrence for elephants' teeth, ambergris, *&c.* all which we should enjoy with ease when we are settled and perfectly known to them.

Besides the plenty of beef it will yield us for food, there is other delicate meat to be found, as muttons, but with hairy skins, hens, and other sorts of fowls, oranges and lemons, and other kinds of rare fruits there naturally growing; which America will not yield us unless we plant them,

which will prove a work of many years, and in the end fail of the excellence of the others in respect of the climate. The sea and the rivers will afford plenty of fish of all kinds. And for the present we shall not want a sufficient quantity of maize and cassada for bread, till we sow our English corn of all sorts.

And for the people in that part of the island, it is known to all that have been there that they have behaved themselves lovingly and respectfully to one another, and no less to strangers. By their civil behaviour and labour they draw their cattle to a tameness, as with us; which shews they are naturally civil, which is not usual amongst such people. And to prove it the more, as well in that as in their other courses, they are Mahommedans in profession of religion; and, though it be as false as falsehood may be to truth, yet by that religion they are taught more civiller conversation and humane behaviour than the Indians or infidels are instructed in, who acknowledge several creatures for Gods—some the sun, some the moon, and some several beasts and creatures of the earth. But I make account with our familiarity, love, and good usage, we shall entice their children, with consent of parents, to bring them for England, where they shall have good education and breeding answerable to our own. And this will be the method to work our good in our plantations of that country, and the only means to propagate Christian religion in remote parts.

Having a plantation or settled dwelling in the island of St. Lawrence we shall make our navigation to the East Indies much more pleasant, short, and profitable by using and settling a magazine of commodities betwixt us and the Indies. First, by

their receiving our commodities and returning those we receive from thence by the same ships we employ; for part of one fleet may be sent from St. Lawrence to the Indies, and return the commodities those countries afford to St. Lawrence, which our ships shall there receive and bring them directly for England. So that all our ships shall be continually going and coming, and every twelve months have a return from thence; which now is more than double the time.

I desire that this project to St. Lawrence may be compared with those our nation has undertaken to America, and the reasons duly considered without partiality. And, being so satisfied, that they would follow them with a general consent, and so settle their plantations that there may be a neighbourhood from one to another. For being, as they are, thus divided they can give no help or succour, but must stand upon their own strength what attempt soever shall be made upon them by an enemy, besides many other reasons one may produce that would much avail them. For what succour can Newfoundland, which is the furthest part north, give the island of Providence, the furthest part south, or any other places betwixt them that we inhabit, as namely, New England, Virginia, Cape Florida, the Barbadoes, St. Christopher's, Tortuga, and the island of Providence, if you examine the distance from one to another and how the currents and winds set upon these coasts.

As the island of Providence is the last I name, so it is the greatest in fame by the persons that countenance it, and by the purses that maintain it. And because you shall know the difference betwixt that island and St. Lawrence, I will here make a

description of the island and refer it to your own judgement.*

* Letters Patent of 4 December 1630, to Robert, Lord Brooke and others, empowered the undertakers to settle Providence and other islands. The Spaniards subsequently expelled or killed the English there. Monson discusses the strategical aspect of the question in the Fifth Book.

The Nature of the Island Catalina, or of Providence, as called by us.

AMONGST many ridiculous and vain plantations we have had footing in several places of America, as appears in this book, there is one small island, whose name we have changed from Catalina to the island of Providence, because some pretend to foresee it may damnify the Spanish nation if they shall hereafter give us occasion of war.

This island of Providence is seated upon the coast of Tierra-firme, one hundred leagues north from Cartagena, eighty leagues north and by west from Nombre de Dios, and from the headland of Gracias a Dios, thirty five leagues. This island, for the greatness of it, may be termed rather a rock than an island, not exceeding ten or eleven miles in length and five in breadth. A small proportion of land to promise either victuals for sustenance, or commodities worthy of labour to countervail the tenth part of charge that has been bestowed on it.

For it is like a barren and uncultivated ground, that of itself can send forth nothing if pains and labour do not make it capable to afford nourishment. Even so this least and worst of islands can promise no more than the ill ground I compare it unto. But our undertakers think by the situation of it that it will advantage us much against Spain, the impregnableness of it by nature considered which we have helped by art.

The island has these particular benefits in it: a port containing eighteen feet in depth with good ground to ride in; it is environed with huge and high rocks and cliffs, and made impregnable against landing in the harbour on the westernmost side of the island, which makes it a safe riding by reason of the perpetual easterly wind that blows off the shore. There is only one place to land in; for, that excepted, it is encompassed about with such rocks that a boat cannot come near the shore. If a ship put but one mile to leeward of the harbour she cannot recover it again by reason of the current, unless she put for Española, and disembogue betwixt it and Cuba, at least three or four hundred leagues backwards and forwards. Neither can they directly go from thence to Cuba by reason of the shoals and flats in their nearest course. Therefore a ship must stand over for the main land, thirty five leagues from Providence, and pass through a channel not half a mile in breadth and yet four leagues in length.

The wind and current set to the westward from Providence till within twelve or fourteen leagues of the shore, and then the current sets to the southward though the wind keeps its continual course from the east; and were it not for the change of the current it were impossible for to fetch Nombre de Dios, Puerto Bello, or Cartagena. Our English ships have a great advantage of the Spaniards, by reason of their fastness by a wind, which the others cannot beat it up because of their leewardness.

Every fourteen weeks the climate wherein the island is seated produces a harvest of corn, pease, potatoes, and other roots and herbs: the potatoes make a delicate kind of drink, both pleasant and wholesome. The sea affords such great abundance

of fish that two boats and ten fishermen will be able to feed one thousand persons every day.

There are two other islands not above sixteen leagues from Providence, the one called St. Andrew, the other the Mosquito, not inhabited. These two islands afford great quantity of tortoises, which will be a great relief to the island of Providence. They are not to be dwelt upon because they cannot be made defensible; and St. Andrew is full of rocks and shoals, and dangerous to come near by any that do not perfectly know it; neither has it a harbour, though in the westernmost part of it one may anchor in safety. And thus much for the description of the island, as namely the height, the seat, the distance, the temperature, and distance from other places. Though there is cause for me to write more particularly of this island, yet will I not here insert it but speak more amply of it in my Fifth Book, to which I refer you.

The End of the Fourth Book.

THE END OF THE FOURTH VOLUME.

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